24 RRs To Test Alco's New Fast Freight Diesel

February 15, 1960

RAILWAY AGE weekly



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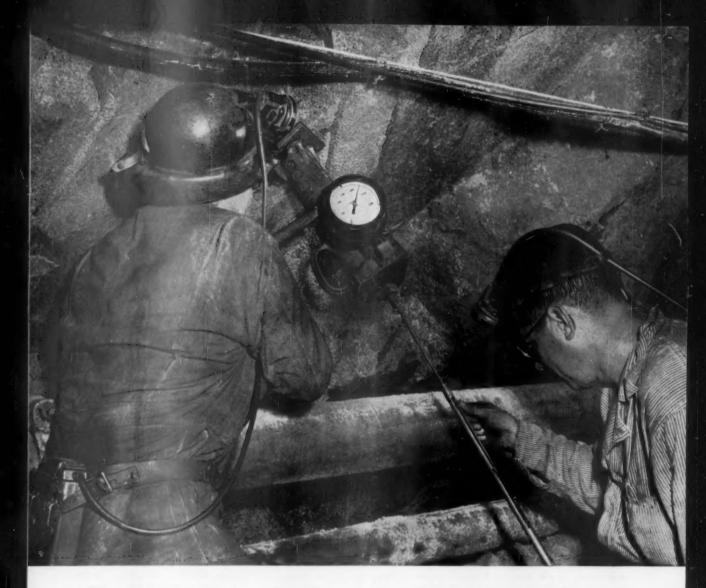
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Congress gets commuter billsp. 9

Legislation now proposed would (1) tighten train-off provisions of the 1958 Transportation Act, (2) authorize federal loans to municipalities for purchase of commuter equipment to be leased to railroads, (3) create a National Advisory Committee on Rail Transportation with special attention to the commuter problem, and (4) give commuters federal incometax credits to absorb fare increases.

Cover Story-CTC clears signals automatically p. 13

The Norfolk & Western uses automated CTC to clear signals without manual attention - except when making meets, passes or handling unusual operating conditions. The automatic circuits were built and installed for \$8,300.

T&P passenger planning boosts revenues p. 14

Aggressive promotion of special services last year enabled the road to achieve passenger revenues 6% above those of 1958. Here's how the T&P moved in a half-dozen directions to improve and publicize its services.

Cover Story-New Alco diesel costs less p. 18

The high-speed freight unit is scheduled to make test runs on 24 railroads. The 2,400-hp, four-axle, four-motor unit delivers 50% more horsepower per axle than six-motor, sixaxle 2.400-hp units like Alco's DL-600 type.

What's new in rolling stock p. 23

A Pullman-Standard tri-level automobile car is being tested by Frisco: Union Tank is building two 85-ft, 30,000-gal. cars for Tuloma Gas Products Co.; Southern will get aluminumcovered hoppers in three sizes from Magor. Here's the story in pictures.

The Action Page: Automation—How much, how soon? p. 50

By actively encouraging the introduction of labor-saving devices, John L. Lewis helped make coal mining a "growth industry" again. Railroad unions could do the same for railroads—if they would permit the industry to take advantage of the tremendous technological strides already made in the direction of automation.

Short and Significant

The railroads' share of the national income . . .

in 1958 was relatively only half what it was in 1939-2.7% compared with 5.7%. These are ratios of gross revenues to



Union Pacific's new and mighty locomotive crests Sherman Hill, Wyoming, with a heavy load.

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This new gas turbine-electric locomotive, built by General Electric for Union Pacific, is designed to haul freight faster and more economically. It burns less expensive "residual" fuel—a thick, viscous substance with a heavy tar content which must be heated before it will flow freely.

The Bendix ignition system fires this low-volatile fuel as efficiently as volatile gasoline is ignited in your automobile engine. The Bendix fuel injection system is used in the auxiliary diesel engine, which also furnishes power for "yard" movement of the locomotive.

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built, is truly one of the finest tributes that could be paid to the all around efficiency of Bendix equipment.

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Week at a Glance !

Current Statistics

12 mos., 1959 ...\$9,826,128,939 12 mos., 1958 ... 9,564,940,702 Operating expenses 12 mos., 1959 ... 7,704,573,256 12 mos., 1958 ... 7,544,050,298 Taxes 12 mos., 1959 ... 1,047,194,279 12 mos., 1958 ... 957,258,608 Net railway operating income 12 mos., 1959 ... 749,476,425 12 mos., 1958 ... 762,355,862 Net income, estimated 12 mas., 1959 . . . 574.000.000 12 mos., 1958 603,000,000 Average price railroad stocks 1960 Feb. 10, 1959 ... 106.40 Carloadings, revenue freight 4 wks., 1960 2,386,511 4 wks., 1959 2,275,214 Freight cars on order Jan. 1, 1960 43.870 Jan. 1, 1959 27.596 Freight cars delivered 12 mos., 1959 ... 12 mos., 1958 ... 42,760

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national income. The airlines' share, during the same 12year period, rose from 0.1% to 0.4%. The truckers' share rose from 1.1% to 1.7%, and the bus lines' share remained at 0.2%. On the basis of 1939 as 100, the national income index for 1958 was 503. The index of rail revenue was only 239.7. The airline, trucker and bus-line indices were 2,905.0, 773.9 and 354.9 respectively.

Last year's estimated net income . . .

of Class I railroads was \$574 million, a decrease of \$29 million from the 1958 net of \$603 million. The rate of return averaged 2.72% for 1959. The AAR statement also showed December estimated net income at \$90 million.

Prices paid by railroads . . .

for fuels, materials and supplies are on the rise again. The AAR's latest index, for January, is 144.4. This interrupted a decline which had run through the two previous quarters. The July 1959 index, at 143.7, was down 2.3 points from April 1959's 146. And the drop continued to 143.2 for October 1959. The index is based on average mid-year spot prices for the 1947-49 period.

Soo Line's guaranteed rate . . .

was further postponed last week-from Feb. 9 to April 9, which will be a year after its original effective date. The new delay was taken voluntarily by the Soo, but at the request of the Commission. The proposed rate, applicable on wrought iron pipe and tubing, would give a 17.5% discount to a shipper who guaranteed to ship 90% of his tonnage by rail. The same 60-day extension has been granted on a companion guaranteed rate tariff published by DSS&A and also involving Milwaukee and C&NW.

Milk by piggyback . . .

is proposed by the Lackawanna in the New York City area. The road has published a Plan IV tariff, to be effective March 6, under which shippers will furnish flat cars, tank trailers, and perform loading service at their own ramps. Origin points covered in the tariff are Cortlandt, Elmira, Norwich, Waterville and Syracuse, N.Y., and Scranton, Pa. Destinations: Hoboken, N. J., and New York City.

An 'institute on rail-labor problems' . . .

will be held April 7-9 at the State University of Iowa, Iowa City. Among the featured speakers, according to the BLE: Labor Secretary James P. Mitchell. The institute will be conducted by the five operating brotherhoods and the university. Discussions will cover the Railway Labor Act, compulsory arbitration, Landrum-Griffin, public relations techniques, and membership communication.



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Congress Gets Commuter Bills

➤ The Story at a Glance: The call for federal aid to sustain railroad commutation services is now pointed up prominently in Congress by a variety of legislative proposals.

Aside from bills to tighten train-off provisions of the 1958 Transportation Act, there are bills for:

 Federal loans to municipalities for purchase of commuter cars and other facilities for lease to railroads.

 Creation of a National Advisory Committee on Rail Transportation with a broad assignment but with a "major concern" for the commuter's "dependence on daily rail transport to and from work."

 Income-tax credits for commuters who pay fare increases necessary to put commutation on a break-even basis.

Can Washington come up with a solution—in whole or in part—to the railroad commutation problem? Both the Senate and the House are giving it a try.

A federal-loan bill is sponsored by Representative Irwin, Democrat of Connecticut. It embodies the commuteraid program sponsored by the American Municipal Association and eastern railroads (RA, Feb. 8, p. 10). It would provide for up to \$500 million in federal loans.

Mr. Irwin concedes that his bill "isn't the only or final answer" to mass transportation problems, but he does suggest that it gets to the crux of the issue of furnishing funds the carriers "don't have and can't get."

The proposed federal lending agency would be a unit of the Department of Commerce, and the loans would be of the "low-interest, long-term" variety—available "only where there was proof of urgent need and where funds were not available elsewhere under similar terms."

The loaned money would be earmarked for purchase, maintenance or replacement of commuter facilities and equipment. Equipment would mean rolling stock, and facilities would include "land, stations, rights-of-way, tracks and track materials, electrification and similar property—but not public highways."

A National Advisory Committee on Rail Transportation is proposed in joint resolutions introduced in both the Senate and House. The Senate resolution was introduced by Senator Javits, Republican of New York, for himself and his New York colleague, Senator Keating, and Senators Saltonstall of Massachusetts and Williams of New Jersey, also Republicans. First sponsor of the like House resolution was Representative Derounian, New York Republican.

As explained by Senator Javits, the advisory committee would be a 12-member group which would "study, conduct scientific research and make recommendations on those development programs and other activities essential to the improvement and modernization of rail equipment, facilities and operating methods and freight, passenger and commuter services so that the U.S. rail transportation system can better meet the demands of our expanding national economy and defense requirements."

The proposed committee's 12 members would include two from the ICC, two from the Department of Defense, and two from the Department of Commerce. The committee's six other members, as Mr. Javits put it, "would be selected on the basis of their technical competence in rail transportation or a related field with two of this group chosen for their experience in labormanagement problems common to the industry."

The proposed legislation also con-(Continued on page 46)

DL&W V-P Joining Trucking Firm

William G. White, vice presidentoperation of the Delaware, Lackawanna & Western since 1954, will become senior vice president of Consolidated Freightways, Menlo Park, Calif., effective March 1. He will be in charge of all CF operations involving coordination with other forms of transport.

"Mr. White's excellent background in railroad management will enable us to expand and develop our operations which involve close cooperation with other modes of transportation, particularly railroads," said CF President J. L. S. Snead, Jr., in announcing the appointment.

These operations include CF's Coordinated Transportation Services Division (which develops cooperative services among truck, rail, pipeline, air and water carriers), Trans-Ocean Van Service (which handles overseas shipments of household goods), Transcontinental Transport, Inc. (a railcar leasing subsidiary), and Warehouse and Cartage Division.

Meanwhile, a railroad has gone to a trucking line to find a transport coordination specialist. Maine Central has announced the appointment, effective Feb. 15, of Frank W. Alger, Jr., of Adley Express Co. as MC's manager of highway operations. A spokesman said Mr. Alger (formerly Maine operations manager of Adley's Alger Brothers Division) will supervise planning and development of the railroad's new railhighway system.



WILLIAM G. WHITE

Mergers, Diversification Forecast

Northern Pacific President Robert S. Macfarlane is taking the optimistic slant on railroad mergers and transport diversification. He views both as "inevitable" during the 1960's.

In an address prepared for delivery at the 53rd annual dinner of the Chicago Traffic Club, Mr. Macfarlane forecast:

• Consolidations "involving several of the important lines in the United States."

• Enactment of legislation which will bring about "one-package" transportation.

NP's president was emphatic on the latter point: "I maintain that the prin-

ciple of diversification is as sound in its application to transportation as it is to other industry . . . With our rapidly expanding economy, the country will need all of its transportation facilities to carry out the stepped-up distribution job that lies ahead."

Mr. Macfarlane also made these observations:

• Business needs more look-ahead thinking. "We sometimes become so engrossed in the day-to-day problems of our own jobs that often we overlook the full significance of the exciting parade of progress in other fields. We fail to project our own business planning far enough into the future."

• Economists and business analysts are anticipating an economic advance "that will be greater than any we have ever known before. There may be booms and there may be recessions . . . but the direction of our economy will be strongly upward."

• "Increasingly huge sums are being invested in research and development"—both by private industry and by government. Research and development spending, Mr. Macfarlane noted, ran \$3 billion in 1950, \$10 billion last year, and totaled about \$60 billion over the last decade. But during the next 10 years, he said, estimates place the expenditure at double that total.

Watching Washington with Walter Taft

• SHIPPER SUPPORT for letting regulated carriers go in for diversification or one-package transportation is on record with the House's subcommittee on transportation and aeronautics. It came from Brown & Williamson Tobacco Corp. and Atlanta Freight Bureau. Their representatives appeared as the subcommittee closed its first series of hearings on pending diversification bills. Further hearings are planned, but not yet scheduled.

LABOR SUPPORT came from the Order of Railway Conductors & Brakemen. Its vice president and national legislative representative, W. D. Johnson, sent Subcommittee Chairman Williams of Mississippi a letter advising of ORC&B's favorable position. The Railway Labor Executives' Association, of which ORC&B is a member, has been opposed.

THE PROPOSED LEGISLATION would repeal regulatory-law provisions which prevent or restrict rail-road operations of highway, air and water services. The railroads' supporting presentation (RA, Feb. 8, p. 35) closed with a warning that the "very survival" of the industry depends upon relaxation of competitive restrictions.

THE WARNING came from President C. M. Roddewig of the Association of Western Railways. He had a chart showing that the railroads' share of intercity freight traffic will be down to 25% in 1970—if they continue losing ground at the present rate.

COMPETITIVE DISABILITIES of the railroads have been principally in pricing and service areas, Mr. Roddewig pointed out. He called enactment of the 1958 act's rate-freedom provisions a facing-up to the pricing disability. So, as he put it, the railroads now ask that

Congress again act "courageously"—that it round out the freedom program by removing disabilities which prevent railroads from giving complete transportation service.

ON THE SENATE SIDE, the AAR submitted a statement in support of diversification to the Interstate Commerce Committee's transport study group. Ownership of one form of transport by another is one of the subjects assigned to this group, and its director, Maj. Gen. John P. Doyle, requested the AAR presentation.

• ETHICAL CONDUCT is the subject of a memorandum circulated by the ICC to its hearing examiners and attorney advisers. The memorandum says the Commission has been disturbed to discover that "at least some examiners appear to believe that they are fully entitled to accept all hospitality extended to them."

SPELLED OUT are details of a case wherein an examiner, assigned to an out-of-Washington hearing, became involved in what the Commission considered too close association with one party to the case. At the expense of that party, the examiner traveled to and from the hearing, and "lunched, dined and drank." He also extended his lunch period beyond the normal noon recess—"to the discomfort and inconvenience of all parties."

THE COMMISSION CONCEDED that an "ivory tower" existence would result in "an unrealistic, uninformed and impractical approach" to regulation. It added, however, that there still remains "the necessity for a constant guard against the close fraternization and the unwise association with parties who possess an interest current or potential in those areas with which we deal."

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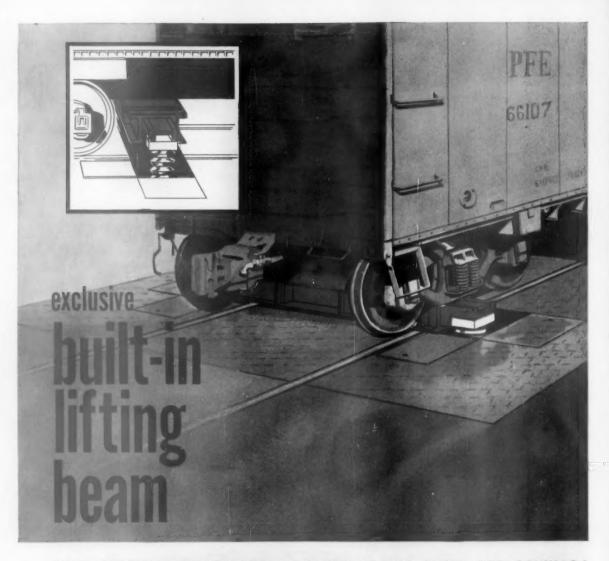
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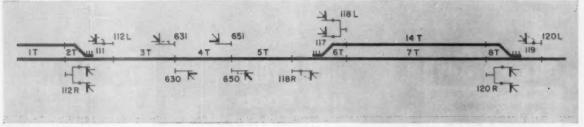
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NEW TRAIN entering track section 1T eastbound initiates clearing of signal 118R without intervention of dispatcher.

CTC Signals Clear Automatically

has developed circuits to clear CTC controlled signals automatically in advance of a train. A dispatcher need only clear the entering signal into CTC territory and arrange meets. Twenty months of satisfactory service indicate the feasibility of approach-clearing CTC signals. The automatic circuits were constructed and installed for approximately \$8,300, including labor and material.

Circuits were designed that would automatically make meets by routing one train into a siding, but as the maximum economic advantage had been gained with the automatic signal clearing feature alone, these were not installed.

Automated CTC is used on the Norfolk & Western to clear signals without manual attention, except when making meets, passes or handling unusual operating conditions.

The main line of N&W's Scioto division extends westward from Williamson, W. Va., to Portsmouth, Ohio. From Portsmouth the line extends generally northward to a terminal at Columbus, Ohio, and generally westward to a terminal at Cincinnati.

Normally, one dispatcher's position handles train movement on the entire division. During the first trick Monday through Friday, while track forces are working and local switching operations are in progress, an additional dispatcher is used. The additional dispatcher handles the Portsmouth-Cincinnati line, thus permitting the regular dispatcher to concentrate on the line between Williamson and Columbus.

The 96-mile single track Cincinnati line has CTC all the way. There are 12 controlled sidings with power-operated switches. Of the 13 scheduled trains, eight operate when the system is clearing signals automatically.

When the additional dispatcher is not

stationed at the Portsmouth-Cincinnati machine, the sequence of events is as follows: When the single stroke approach bell sounds, the regular dispatcher goes to the machine and clears the entering signal to CTC territory in the normal manner. Thereafter, signals clear sufficiently in advance of the train so that the engineer will always receive a green aspect if track conditions allow. (The N&W has switched to color-position signals. See RA, Sept. 7, 1959, p. 44). Whenever a train enters the block of the approach signal to a home signal giving a stop indication, a vibrating bell sounds until it is acknowledged by the dispatcher. The bell indicates that appropriate action must be taken if stopping of the train is to be avoided.

When, for example, a train enters track section 1T (see accompanying track diagram), the clearing of signal 118R is initiated. It is done at this time to establish direction: The circuit is completed only if signal 112R is clear. Thus, signal 118R will not clear for a train receding from 1T to the left. The circuit to cause signal 118R to clear will be completed if: (1) the opposing signals 120L and 118L are at stop and no attempt is being made to clear them; (2) track sections 6T, 7T and 8T are unoccupied; (3) track section 1T is occupied; and (4) signal 112R is clear.

Train Gets Green Signal

The signal will clear only to yellow at this time, since signal 120R is still red. Later, when the train reaches track section 4T, the clearing of signal 120R will be initiated. When that signal clears, signal 118R will go to green. Except under abnormal circumstances, this would happen long before the train reaches signal 118R.

When a conflict between trains arises, the signals involved will not clear. When the trains enter the approach signal track sections, the vibrating bell



AUTOMATED CTC has been installed on N&W's Cincinnati-Portsmouth line.

sounds, and the dispatcher arranges the meet or pass.

The additional circuits to clear the signals automatically are associated entirely with the CTC control machine, no change being necessary in the field circuits. On the control machine, the lamp that is lighted steadily to indicate that the signal is at stop is caused to flash when the automatic circuits initiate clearing. When the signal clears, the appropriate signal-clear lamp lights. No other change was made in the machine indication circuits and all levers on the machine retain their normal function.

A switch on the machine disconnects all automatic circuitry when completely manual control is desired. It is not necessary to operate this switch while making a meet under automatic operation.

The circuits were designed by N&W signal engineers under the direction of J. G. Karlet, superintendent signals and communications.













T&P Passenger Planning Boosts

Big things are still happening in Texas. For example: Texas & Pacific's current showing on passenger traffic.

Over the first six months of 1959, T&P passenger revenues climbed 15.7% over revenues for the comparable 1958 period. It was a showing that placed the road at the top of the Class I list from a standpoint of revenue increase percentage. And although revenues fell off slightly during the July-December period, T&P still ended 1959 with a net increase of 6%, on total passenger revenues of approximately \$3,940,000.

In comparison with the transcontinental lines or the major eastern trunk lines. Texas & Pacific isn't a major passenger carrier. Its service covers 14 trains daily (including two sections of the "Texas Eagle") and the operation

is confined to the main line—Texarkana-El Paso and New Orleans-El Paso. Still, on average, T&P stands at the top.

Part of the story lies in the road's being in the right place with the right service at the right time. But much of the credit goes to alert passenger promotion, individually and in conjunction with passenger-wise Missouri Pacific (which also showed revenue increases last year, but on a smaller scale).

Better economic conditions in the area also gave T&P an assist in its first-half surge. Particularly noteworthy: a 42% increase in T&P's share of revenues over the Texas & Pacific-Southern Pacific route.

Another traffic boost has come from the discontinuance of the Katy-Frisco

"Texas Special" service between St. Louis and Texas points. MoPac—T&P remains as the only through route.

As for passenger promotion, T&P has moved in a half-dozen directions to improve and publicize its service:

- Coach tickets are honored in conventional sleeping cars on the New Orleans-Dallas-Fort Worth-El Paso route.
 Earnings from the conventional cars have been increased, revenues from lightweight sleeping cars haven't suffered as a consequence.
- Economy meals (in addition to regular dining car service) have proved popular at prices ranging from 75 cents and 85 cents for breakfast, to \$1 for lunch and dinner.
- T&P is selling two roomettes for the price of a double bedroom between all points on T&P and MoPac and also





Revenues

to Chicago in conjunction with the GM&O.

• Tickets valued at \$50 or more are available on an installment pay plan (to purchasers of satisfactory credit rating). Fares may be paid on a basis of 25% down and the balance over 10 months (balance includes a 2% service charge).

• For groups of five or more travelers, the road offers a special low coach rate for round-trips between all T&P points. This move, in particular, has attracted a large volume of traffic which would otherwise have been lost to the private automobile.

 All the innovations have been vigorously advertised in newspapers and on television. T&P has spread its newspaper advertising dollars throughout the paper, instead of concentrating

on full- or half-page ads. Two-inch block ads, four to eight to a paper, are scattered—news pages, sports, financial, society. The approach has proved effective ("the ads we've run produce business" and T&P has letters from agents to back the claim). And the

cost is less than that of larger ads.

The result: T&P, unlike most roads, is watching its passenger revenues move upward. Alertness is paying off. And, for the time being at least, Texas & Pacific isn't too worried about where its next passenger dollar is coming from.

Passenger Poll Steers T&P Right

The heady aroma of success in the passenger field hasn't led Texas & Pacific into over-confidence. It didn't for example, deter the road from launching a full-scale passenger opinion survey at a time when revenues were already up 15.7% over those of the previous year. More than that, however, this was no study to be made, noted and left to collect dust. T&P acted, once it knew what little irritations were making travel-by-T&P less than a complete joy for the passenger.

A representative of the road's advertising agency conducted the survey, which covered replies from 461 T&P passengers and 53 trainmen. Here are some of the findings:

• 307 passengers said they were traveling by train because it's more relaxing. In second place: Safety and lower cost, each noted by 185 passengers.

• Of the 461 patrons quizzed, 244 voted for the railroad as their preferred mode of transportation. But 101 chose the private automobile and 89 mentioned the airlines.

• Clean equipment and courteous employees were praised by most passengers surveyed. Conversely, T&P got 51 replies criticizing equipment, 50 rapping the service.

• Significantly, passengers gave the railroad a highly favorable rating in comparison with other carriers. T&P's ratio of favorable vs unfavorable comments was 384 to 19 in comparison with other railroads; 114 to 29 with the airlines; and 268 to 6 with bus lines.

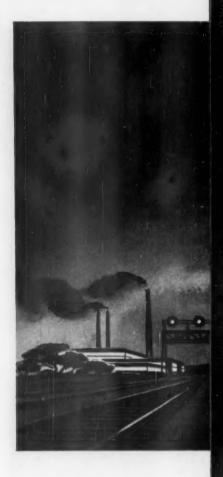
• T&P found its patrons don't hold to the widely accepted view that the airline is the route of most courteous service. The road posed the question: "Which of the following forms of transportation provide the most courteous, considerate and helpful service?" More than half the passengers surveyed—236—voted for the railroad. The airlines got 145 votes, the buses only 11.

T&P's questionnaire provided space for patrons to air their view that the airline is the route of most courteous service. The road investigated the complaints and, in many cases, eliminated them quickly and simply.

Passengers on one train said they were delayed in detraining because the train crew didn't open enough vestibule doors. Now more doors are being opened. Another complainant contended that insufficient information was being given to passengers at a point where two trains are consolidated. More information is now being given. Still another suggestion proposed relocation of a night train check-in counter to a more convenient and accessible spot. The counter has been relocated.

Little, nagging irritations accounted for most of the complaints and suggestions. But, T&P figures, when you have nothing to sell but service, the old adage "It's the little things that count" adds up to far more than just a cliche.

RAILROAD BEARINGS are MAGNUS' BUSINESS



Today, and tomorrow too, you can bank on Magnus to give you the bearing performance you <u>want</u> at a price you can <u>afford to pay!</u>



Magnus Solid Journal Bearings



Magnus R-S Journal Stops



Magnus Traction-Motor Support Bearings



YES, Magnus is in the railroad bearing business—has been almost from the days of the Tom Thumb! And during this century of specialized service, Magnus has pioneered many significant advances in bearing metallurgy and design—to provide better bearing performance at lowest possible cost.

For example, the recently-introduced Magnus R-S Journal Stops have given railroads the first truly low-cost solution to the hot-box problem. By taking the "slop" out of the journal box, R-S Journal Stops prevent excessive displacement or lifting of the bearing—even under the most severe braking and switching impacts. They increase bearing life 200 per cent, reduce wheel flange wear, protect dust guards—cut operating costs all along the line. Magnus lubricators provide another important

link in the chain of improved bearing performance. And in diesel-electric and electric locomotives and MU cars, modern Magnus traction motor support and armature bearings assure trouble-free mileage between motor overhauls.

And Magnus is keeping a weather eye on the future, too. With this background of railroad experience, Magnus is continually developing and testing new designs of journal box components for still greater efficiency and economy in railroad service. Whatever the future may hold, of this you can be sure. Tomorrow's rolling stock will ride on Magnus bearings—bearings that are right for railroads in performance and in cost. For further information on Magnus bearing products, write to Magnus Metal Corporation, 111 Broadway, New York 6, or 80 E. Jackson Blvd., Chicago 4.

MAGNUS

Subsidiary of NATIONAL LEAD COMPANY





THREE-UNIT DL-640 locomotive handled fast freight assignments on New York Central. It is shown arriving at

Selkirk Yard near Albany, N.Y., with 8,400 tons on NY-2, a Chicago-to-New York hotshot.

New Alco Diesel Costs Less

Alco's new DL-640 high-speed freight locomotive began demonstration runs last month.

The new low-profile, short-hood road switcher is a 2,400-hp, four-axle, four-motor unit. It delivers 50% more horse-power per axle than six-motor, six-axle 2,400-hp units like Alco's DL-600 type.

Its first cost is lower than that of the DL-600 because it has fewer components. Repair costs will be lower, Alco predicts, and maintenance will be simplified because the new unit has fewer components.

(A 2,400-hp, six-axle, six-motor road switcher has been available since 1952, and Alco, Fairbanks-Morse, and General Motors all have units of this type. Alco is the first of these builders to channel this much power through four motors in a diesel freight unit. The Alco DL-640 is not, however, the first of this type to be built. General Electric has had two 2,400-hp units with this wheel arrangement in road tests for some time, but has not released data on either design or performance.)

Five DL-640 test units have been built and are now scheduled to make runs on 24 railroads. The units are operating as two locomotives—one with three units, the other with two units.

The DL-640 represents no compromise aimed at fitting it for all types of service. Its existence means that a lower cost locomotive is available for use where high continuous tractive effort at low speeds is not required. At high speeds its performance should equal that of any 2,400-hp unit. The DL-640 has a rating of over 18 hp per ton on drivers, compared with the 14 to 15 hp per ton of other 1,800-hp and 2,400-hp units.

The first demonstration run—with the 3-unit locomotive—was made January 11 on New York Central's New York-Chicago LS-1, which hauls Flexi-Van and merchandise cars on a 29-hr schedule. On the return trip, leaving Chicago January 13, the 7,200-hp locomotive powered the NYC's NY-2. Departing Chicago nearly three hours late with an 84-car train, the locomotive delivered the train to Selkirk Yard, near Albany, N. Y., exactly on schedule.

Units used in the NYC demonstration runs are geared for 75 mph. Gear ratios for 65 and 80 mph are also available. The DL-640 unit weighs 256,000 lb. It is 57 ft 2½ in. long, some 9½ ft less than the DL-600-B. Its short front hood has not been designed to house a steam generator. The hood has been cut down in height so that a "picture window" windshield can be installed across the front of the cab. This general arrangement was first introduced on DL-600-B's delivered to the Santa Fe last summer (RA, May 18, 1959, p. 9).

The DL-640 has the same model 251 diesel engine used on other Alco 2,400-hp units. Power from the Vee-type, supercharged engine is transmitted to the drivers through General Electric traction equipment—a GT-581 main generator and four GE-752 traction motors. Dynamic braking is available.

Because of the weight of the unit, its train-starting ability is comparable with that of Alco's current four-axle, 1,800-hp DL-701 road switcher. With only four motors and the 2,400-hp rating, the DL-640's lowest continuous speed available is over 14 mph, compared with the 9-mph range of the sixmotor DL-600-B. At all speeds above 15 mph the train-handling ability of the DL-640 will equal that of the DL-600-B.

There are dollars for you in

Edgewater

rolled steel wheels

Welcome savings are available to you in Edgewater Multiple-Wear Rolled Steel freight car wheels. The extra mileage they give means lower ultimate cost. Edgewater skill and experience in the production of solid rolled steel wheels assures highest quality.





Edgewater Steel Company • P.O. BOX 478 • PITTSBURGH 30, PA.



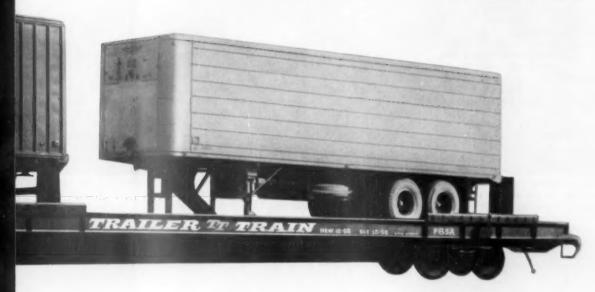
the ACF 85'flat car more economical

economy in weight: New lighter construction enables it to carry higher payloads . . . two forty foot or three twenty-seven foot trailers, up to 140,300 lbs.

ble Trailer Hitches, as standard equipment, trailers can be loaded and secured in less than three minutes by one man. There is greater

cushioning protection, greater safety to trailer and lading without special handling.

economy through versatility: Car will accommodate all sizes and types of trailers without special attachments on the trailers. With slight modifications, the car may be used for most types of farm and construction equipment or military vehicles.



helps railroads achieve piggyback operations

economy of initial and long-run cost:

Car delivered complete with ACF Trailer Hitches, combination side sill and guide rail, anchor safety chain and bridge plates. Save on maintenance as well as initial cost.

AMERICAN CAR AND FOUNDRY

Division of QCf Industries, Inc. 750 Third Avenue, N.Y. 17, N.Y. SALES OFFICES: NEW YORK PHILADELPHIA WASHINGTON, D. C. CLEVELAND CHICAGO ST. LOUIS SAN FRANCISCO







RRs Seek Perishable Traffic

Handicaps notwithstanding, the railtoads are aiming to increase their share of the perishable movement east from California and Arizona. But, Santa Fe Traffic Vice President G. E. Duffy pointed out recently, both the carriers and the perishable industry would stand to gain if railroads were permitted to compete with trucks on an equal basis.

"Unless the same rules are applied," he said, "I am afraid the railroads will continue to suffer and . . . I have a strong feeling that in the long run this will be harmful to the [perishable] industry. For years we have understood that known rates applied without discrimination was of the utmost importance in the orderly marketing of perishable commodities. If this is true and if the movement by exempt trucker grows, it is only natural to believe that a harmful effect in this respect will follow."

Despite declines in traffic, Mr. Duffy noted, the railroads have improved schedules and invested heavily in new equipment. And the perishable industry has had the benefit of hold-downs which have kept rates below levels permitted by ICC-approved percentage increases generally.

A Commission investigation nearing completion now may bring some increases—but the effect can be minimized through heavier loading. Based on the record, Mr. Duffy said, "it is very clear that for the heavier loads there will be either no increase or the increase will be very much less than will be applied for the lighter loads . . . It is now and will be in the future of greatest importance to the industry to figure on ways and means of loading and shipping cars at the highest possible weight in order to obtain the benefit of the lowest possible unit cost."

Incentive rates for heavier loading are also a factor in the equipment situation—particularly where carriers are investing up to \$30,000 per unit in large numbers of mechanical refrigerator cars.

The only way such cars can be made to pay, Mr. Duffy declared, "is through obtaining heavier loads and by utilizing them in return movement. They are particularly adapted toward moving perishables under the incentive rates for heavier loading and are adapted toward the movement of ordinary freight west-bound because of the size of the car and the fact that they are equipped with dividers [to] bulkhead the freight."

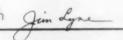
Lower rates at heavier minima loadings are coming into increased use. One example: during the last potato shipping season in Kern county, California, more than 85% of the movement was at a weight bracket of 43,000 pounds—7,000 pounds in excess of the normal weight. The result, Mr. Duffy said, "was a marked reduction in the transportation cost of a bag of potatoes."

Santa Fe's traffic vice president made his comments in addressing the United Fresh Fruit and Vegetable Association's convention in Chicago.

Railroading



After Hours with



HOME-MADE NAMES—Frank Schuler, public relations director, C&EI, tells me that

the second word in West Vienna (Southern Illinois division, C&El) is pronounced Vy-enny. And Joppa in Little Egypt is made to sound like Joppee. Most everybody knows that Cairo in Little Egypt is Kay-row. In New England, Berlin has its accent on the first syllable.

I'm glad I grew up on the English language, and didn't have to learn it in school. It beats me how a poor foreigner ever learns to spell and pronounce it—when those of us who have lived with it all our lives have such a time doing it correctly.

RIGHT RAIL WEARS FASTER?—There's a big argument going on in

the letters-to-editor columns of the French weekly magazine "Paris Match"—on the assertion that, on a north-south railway track the right rail gets more wear than the left. The cause is alleged to be the rotation of the earth. One of the correspondents (identifying himself as an engineer for the French railways) says there have been no measurements made to establish as a fact that the right rail gets heavier wear.

MULTI-LINE ROUTING—Personnel Director Yerby
Holman of the WM comments on the piece I had here reporting the many-line routing of a car from Pennsylvania to the Pacific. He asks:
"Isn't it just this sort of thing which runs up switching and

terminal costs unnecessarily and reduces per-car earnings?"
My answer would be: Yes. But I'd also have to add
that, probably, the only answer to the condition is more

mergers. Because a multitude of railroads cannot stay in business unless shippers can route their traffic; and, as long as shippers have this freedom, there are bound to be some jokers among them who will make full use of the prerogative.

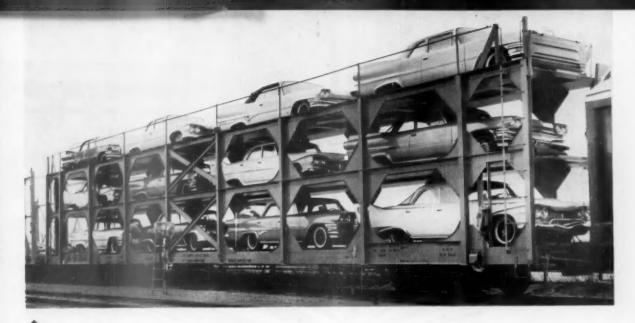
Incidentally, as far as the particular car mentioned here Jan. 5 is concerned, Revenue Auditor N. Y. Schoeplein of the WP tells me its routing was greatly simplified enroute—by diverting it to one-line movement between Kansas City and Salt Lake City.

'SOFT' SALES TECHNIQUE—I've had a lot of mail on this subject since our arti-

cle about it appeared (RA, Jan. 4, p. 25). One former traffic salesman tells how he had parried questions from customers about the misbehavior of his railroad back in the old days 75 years or more ago. His tactic was to admit the errors and point out that the men who did the misbehaving are now gone. "The people running our railroad today are no more to blame for those things than a modern dairyman is because some farmer, 50 years ago, watered his milk."

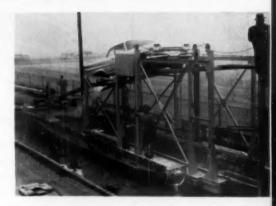
This salesman, instead of making assertions to shippers, says he always tried to elicit questions instead. "What you say on cross-examination carries 10 times the weight that the same words make as a direct assertion."

Also, this salesman didn't talk primarily about this railroad's service. Instead, what he did was to try to find out
what his customer's problems were in marketing his product, and seeing how the railroad could help him solve them.
Such selling, he concludes, seldom gets immediate business
—but, persisted in, it does the job.

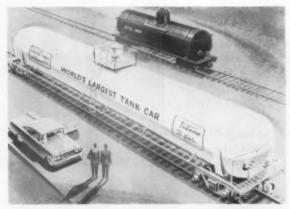


FRISCO TRI-LEVEL AUTO CAR was hustled into operation early this month. Pullman-Standard's Michigan City, Ind., plant built 85-ft, 138,000-lb car in 21 days. Car is fitted with P-S 10-in. travel cushion underframe. Height over guard rails is 16 ft 10 in., and loaded height is 18 ft 4 in., well within clearances of Frisco lines where car is to be used.

LOADING RAMP FOR TRI-LEVEL was built by Frisco shops on existing flat car, for use during test runs. Each deck of tri-level flat has its own piggyback-style bridge plates to facilitate loading. All corners of the big car are equipped with ladders to give automobile drivers access to any of the three decks. Compact or standard autos can be handled.



What's New in Rolling Stock

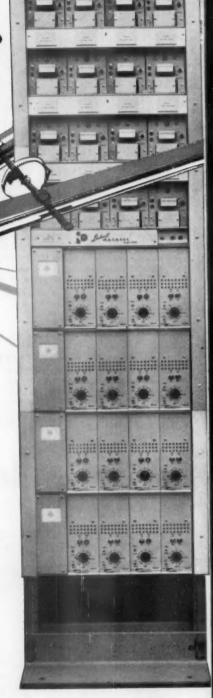


LIQUEFIED PETROLEUM 7AS will be moving in two 85-ft, 30,000-gal, tank cars this spring. Union Tank Car Co. is building Hot-Dog design cars for Tuloma Gas Products Co.



ALUMINUM-COVERED HOPPERS being built for Southern by Magor Car Corp. are in three sizes, including smallest—this 2,600 cu ft design with light weight of 43,600 lb.

Cenkurt.



Lenkurt Type 23A Datatel 16-Channel Terminal

- Frequency-shift telegraph carrier system with operating speeds up to 100 words per minute.
- Fully transistorized equipment capable of operating directly from 48 volts d.c. (or 115-volt, 60-cycle power supply if desired).
- Low power consumption—only 2.5 watts dissipation per channel!
- Transistorized circuitry with a receiving relay of extreme reliability for exceptional flexibility in loop arrangements. A multimeter and VTVM are normally the only test instruments required.
- Frequency-shift operation affords greatest tolerance to level changes with smaller variations in bias.
- Presence or absence of carrier can be used for signaling or supervision, as in TWX or TLX service.
- Partially equipped systems can be installed with only one or two channels—expanded in small steps thereafter.
- One channel unit type is common to all channels. Frequency-determining networks are plugin, simplifying spare equipment requirements.
- Compact. Less than 2.5 rack spaces per channel required for fully equipped terminal assemblies.

Check

these

features!

the <u>new</u> dimension in system communications

Adds high-speed telegraph, telemetering, remote control and digital transmission to any communication circuit

Lenkurt Type 23A Datatel telegraph carrier equipment offers a fully transistorized frequency shift system capable of great flexibility with minimum maintenance. It is designed to operate over voice-frequency circuits, whether physical, carrier-derived or radio.

Because of its unusual versatility, the 23A can be used initially for carrier telegraph *up to 100 wpm*—used now or later for automation.

Provisions are made for the simultaneous operation of 18 channels on a 4-wire circuit, or 9 channels on a 2-wire circuit. Eight additional 4-wire channels or four 2-wire channels are provided above the v-f range, between 3550 and 5050 cps.

AE-Lenkurt is equipped to handle *all* your communication needs—from planning and installation to equipment and supplies. *There's never need to look elsewhere*.

For full information on Lenkurt Datatel and companion equipment, as well as AE telephone equipment and supplies, call your Automatic Electric representative, or mail coupon today.



AUTOMATIC ELECTRIC

Subsidiary of GENERAL TELEPHONE & ELECTRONICS



ALL YOUR

Control

Control

FROM

ONE DEPENDABLE

SOURCE





February 15, 1960 RAILWAY AGE

Director, Railway Sales
Automatic Electric Sales Corporation
Northlake, Illinois

Please send me literature on:

Lenkurt Datatel

Lenkurt Carrier

Lenkurt Microtel

AE Telephone Equipment

Lenkurt Supervisory and Control Equipment

Name

Title

Company

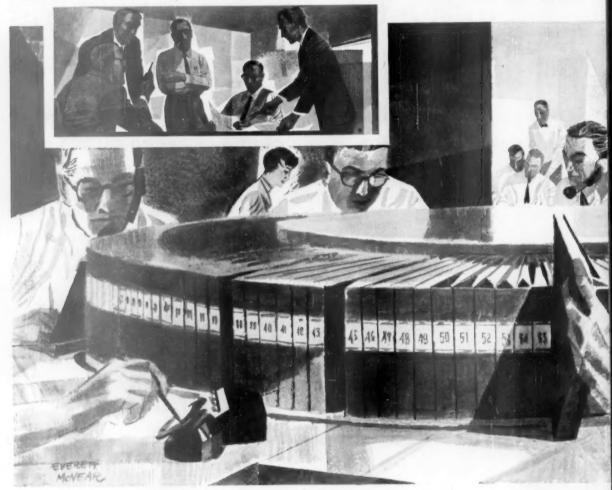
Address

In Canada: Automatic Electric Sales (Canada) Ltd.,

185 Bartley Dr., Toronto 16, Ont.

SOMETHING NEW IN RAILROADING ...

CREATIVE CREWS



How they turned a car-tracing table into a whole new concept of car-control

IT'S CALLED CARSCOPE!

All we asked for was a car-tracing table.

We gave the assignment to one of our Creative Crews, requesting an extra-efficient set-up.

The men in this particular Creative Crew come from different departments of the Milwaukee Road. From Traffic, Rates, Operation, Accounting. They have special skills and, like all of our Creative Crews, they applied fresh, new, imaginative thinking to the problem.

They came up with a fresh, new, imaginative solution -CARSCOPE.

Instead of just a car-tracing table, they built a whole new department for you! With a phone call to this one department, shippers now can order special type cars, trace, expedite, divert or reconsign any one of 50,000 carload shipments rolling over our roadbed every day. Tracing your car is only a matter of minutes. Diversion

of the Milwaukee Road



or reconsignment can be effected at your request, in the same short period of time.

Most important and unusual, our new Central Freight Service Department is staffed with specialists. When you call with a problem, a qualified person is put to work on it. He knows what you're talking about because he has had in-the-field experience with exactly that type of problem. He works for you and with you.

This combination—of a central unit to perform all 5 vital functions, and the staffing of that unit with expert help instead of clerks alone—adds up to a new concept of control over carload shipments. You get the benefits! You make the savings. You exercise the control!

CARSCOPE is the kind of forward-looking, creative way of doing business that has made the Milwaukee Road America's resourceful railroad.

Route of the Super Dome Hiawathas and Western Cities fleet



Aluminum Protects B&O Cars

Baltimore & Ohio recently equipped 50 box cars with 42-in. high aluminum linings developed by Aluminum Company of America. Tongue-and-groove panel design, it is claimed, simplifies installation; lining is fixed to side posts with blind rivets. Horizontal side panels decrease in thickness from base to top, giving maximum impact strength at bottom and producing smooth transition to wood siding at top. End panels are applied vertically. Weight is 1,150 lb per car, slightly higher than wood.



Simmons-Boardman Acquires Railway Educational Bureau

The Railway Educational Bureau, Omaha, Nebr., a 45-year-old organization engaged in apprenticeship training programs for railroads, has been acquired by Simmons-Boardman Publishing Corp., New York.

A. J. McGinnis, president of Simmons-Boardman, announced the acquisition. B. Charles Walters, supervisor of apprentice training, Rock Island, Moline, has been appointed director of the Bureau. He will assume his duties at the Omaha headquarters March 1.

The Bureau publishes training materials, including textbooks, for use in apprenticeship programs in the mechanical, signaling and other railroad departments. Classroom courses range up to four years in length, and supplement regular on-the-job training. At present, the organization has training contracts with 15 Class I railroads.

Simmons-Boardman publishes a number of business papers, including—in the railway field—a newsweekly, four monthly magazines, and a quarterly

Spanish-language edition. These publications are Railway Age, Railway Locomotives & Cars, Railway Signaling & Communications, Railway Track & Structures, Railway Purchases & Stores, and Selecciones del Railway Age.

In addition, the company maintains an extensive book publishing operation. Current titles include books about railroad operations, economics and regulation, as well as specialized engineering works about railroad locomotives, freight and passenger cars, and track and roadway.

"This acquisition of the Railway Educational Bureau will strengthen Simmons-Boardman's ability to serve the railroad industry by supplementing the numerous publications we now have," Mr. McGinnis said. He noted that business papers themselves provide an important educational service at the management and engineering levels, while the Bureau will expand this into all levels of railroad personnel.

Courses presently offered by the Bu-

reau cover all phases of the locomotive and car department, the signaling department and supervisory training. Immediate plans call for the addition of courses covering maintenance of way and engineering, and purchases and stores.

The Bureau was founded in 1914 by Dexter C. Buell, who died in Omaha Jan. 21 at the age of 78 (RA, Feb. 1, p. 36).

Big N&W Locomotive Order Is Completed

The Norfolk & Western has received the final unit of the 192-locomotive order it placed in June 1958.

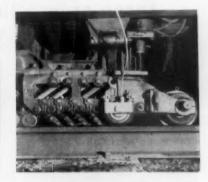
The 1,800-hp general purpose diesel was "delivered" by Richard L. Terrell, vice president of General Motors and general manager of the Electro-Motive Division. To mark the occasion, Mr. Terrell presented a gold-plated control lever to N&W President Stuart T. Saunders.

N&W has acquired 529 diesel locomotives since it began to switch from steam four and a half years ago. The 192-locomotive order was one of the largest ever placed by a railroad with one manufacturer of diesel locomotives.

New Products Report







Sliding Rail Joints

A sliding joint is available for installation in welded track, on curves and on approaches to bridges and trestles. It is claimed to reduce stresses in rail and structures and prevent rail buckling or separation at joints. Each joint weighs about 2,400 lb and includes a fixed casting and a sliding wing rail. The casting is constructed in conformance with AREA specifications and is held in place on the ties by standard fasteners. The wing rail consists of standard AREA rail that slides within the casting as the rail expands or contracts. The joint shown in the picture provides a normal movement of 24 in., 12 in, each way from the neutral point. The manufacturer states that movements greater than 24 in. can be provided. The sliding joint is available constructed of open-hearth materials throughout or with a manganese casting and open-hearth wing rail. Heat treatment of the wing rail is optional. Conly Frog & Switch Company, Dept. RA, 362 Bodley Avenue, Memphis 9,

Spring Switch Gage

This spring switch compression gage simplifies the many circuit controller, lock rod, and buffer tests made on spring switches by measuring actual pressure exerted by the switch point against the stock rail. The unit weighs 28 lb and consists of a frame of two parallel steel hooks to which is pivoted a piston plunger. A cylinder fits over the plunger and acts as the air pump for obtaining operating pressure. A pin locks the cylinder and plunger in either operating or carrying position. A gage indicates the applied pressure up to 3,-000 lb. Pressure can be released by a quarter-turn pressure release valve. The parallel hook frame is placed over the stock rail with the plunger end against the side of the open switch point. Moving the handle back and forth builds up a pressure that forces the open point towards the stock rail and pulling the normally closed point away from its position. Readings of the pressure can be noted at any point in the test. Pettibone Mulliken Corp., Dept. RA. 4700 Division St., Chicago.

Ultrasonic Rail Testing

Transverse defects in rail heads can now be detected throughout the entire length of the rail, including the joint areas, it is claimed, by the use of ultrasonic testing equipment which is being installed on the Sperry fleet of detector ears. It is stated that with the new equipment small defects existing on the surface of the rail can be readily screened out so that more serious defects can be distinguished. The new system is made up of three major components: the transducer wheels, the detector control center and the tape recorder. The transducer wheels are mounted at the rear of the main brush carriages. The sound is coupled onto the rail by means of a film of water which is applied as part of the standard test procedure. The detection control center contains the ultrasonic instrumentation for scanning and monitoring the rail. The tape recorder records this information by one pen which deflects right for right rail defects or left for left rail defects. Sperry Products, Inc., Dept. RA, Danbury, Conn.



Manual Slack Adjuster

This manual slack adjuster is a telescoping push-rod which, it is said, requires no welding or riveting. It can be installed in about 3 min. by one man. It adjusts both trucks simultaneously from 12 to 7 in. in less than a minute from side of car. Each of its six parts can be renewed separately. It is cadmium dichromate plated and uses the Acme type thread. Spring Packing Corp., Dept. RA, 332 S. Michigan Ave., Chicago 4

Chemistry, conscience, and

three of the things that make Wyandotte cleaning



Painstaking research can develop an excellent cleaning product. Strict quality-control standards can assure that it will be duplicated in quantity. But unless, at the point of use, there is a practical, down-to-earth understanding of the special problems that product is designed to solve . . . it cannot work to full advantage.

Wyandotte has what it takes to make cleaning products work . . . right down the line!

Wyandotte research is broad in scope, and to the point. Our facilities for cleaning-product research are unequalled in the industry. Because we are constantly improving existing products to meet present needs better... and developing new products to handle new problems... we offer a complete and up-to-date line of cleaners for every railroad requirement.

Wyandotte quality is meticulously controlled

The most advanced analytical techniques are employed in Wyandotte laboratories.



good common sense...

products work better for you!

throughout the manufacture of each of our products, to ensure a uniformly high standard of performance.

Wyandotte service is in the hands of experts who deal with railroad-cleaning problems exclusively. Your Wyandotte cleaning specialist is assigned permanently to your line. He devotes his attention to your problems. He knows when, where, and how to use each Wyandotte product for best results at lowest use-cost.

These specialized products and services—and the resources back of them—are important. For, cleaning today is a specialized business. It is our business. May we serve you? Wyandotte Chemicals Corporation, Wyandotte, Michigan. Also Los Nietos, California, and Atlanta, Georgia. Offices in principal cities.

Products like these have made Wyandotte the name to know for dependable cleaners to meet every railroad requirement:

Wyandotte-468 solvent emulsion cleaner and degreasing compound (synthetic type).

Wyandotte-11 heavy duty vat cleaner.

Wyandotte-85 mild acid exterior railroad equipment cleaner.

Wyandotte-548 mild alkaline exterior diesel locomotive cleaner.

New Aerowash-A all-purpose alkaline cleaner (liquid).

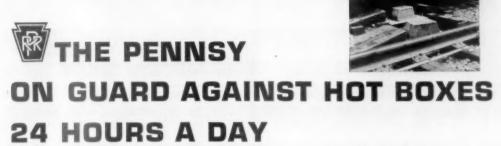


J. B. FORD DIVISION

Complete line of cleaners for all railway needs







Like sentinels in the night,
Servosafe® Hot Box Detectives*
guard strategic locations on the Pennsy
24 hours a day
against one of the principal causes
of damage and delay—
the hot box.

The Servosafe system automatically actuates controls that set signals to a stop position as soon as an overheated journal is spotted out of harmless thousands on passing freight trains.

The patented Servosafe Detection, Carrier, and Automatic Alarm System, performance-proved first on the Pennsylvania, is another step in the Pennsy's progress to give its customers the finest rail service available.

With its Compatible Transistorized Carrier and Automatic Alarm Systems, the Servosafe Hot Box Detective continues to lead the way in serving railroad safety and efficiency.

Full information is available on request.

°Protected by U.S. & Foreign Patents, Including U.S. Patent No. 2,880,309. Other U.S. and Foreign Patents Applied For.

SERVO CORPORATION OF AMERICA



Serving Safety Through Science

Railroad Products Division • 111 New South Road, Hicksville, Long Island, New York

Ф **D** ervice RAILWAY AGE

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands: i.e., with last three digits omitted)
MONTH OF NOVEMBER AND ELEVEN MONTHS OF CALENDAR YEAR 1959
MONTH OF NOVEMBER AND ELEVEN MONTHS OF CALENDAR ASSESSED.

Name of Road		Average mileage operated during	1	Operatio	Revenu Total (it	ss misc.)	Maint	Way an	d Structs Deprecand and Retire-	Total	Total R	g rxpens ipment eprec, and ketire-	Traffic no	Trans- T	Total 1950	Total 1958	Operation 19	Ne fro	of Rail	way k	et Rally operatin income 59 19	88 88
Akron, Canton & Youngstown Alabama, Tean. & Northern Atchison, Topeka & Santa Fe.	Nov. 11 mos. 11 mos. 11 mos.	171 216 12,992 13,040		35,794	5,400 255 3,106 51,028 578,534	4,732 319 2,854 51,531	52 640 50 5,748 73,713	578 578 56 56 56 57 57 77 98	61 61 735 1,873 115	0.10		15 164 62 62 2436 1.3 25,672 15,4	-8	436		348 79 3,833 76 1,814 39 1,814 59 38,256 73 102,746 75	725502	1,296 9 1,296 9 1,247 13,676 9 142,046	729 Cr.78 7.278 79,563	354 354 5,254 53,475	Wo	nanana
Atlanta & St. Andrews Bay. Atlanta & West Point. Western of Alabama	Nov. Hi mos. Nov. Hi mos.	881 933 133	358 3,618 2,652 3,185	237	3,672 3,483 3,483 3,832 3,833	3.897 3.897 3.384 3.344 3.574	45.5 473 473 548 548	36.8 36.8 46.4 48.9	3888	333 333 878 878 688	326 326 477 669 23 2	2088 2088 2088 2088			2223 2323 3, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5,	16.3 47. 26.1 87. 26.1 87. 26.7 88. 82. 83.	6 8 8 9 8 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	1,7492 6 832 6 832 6 832 6 893	795 200 200 37 459	208		COMPAG
Atlantic Coast Line Charleston & West, Carolina Baltimore & Ohio	Nov. II mos. II mos. II mos.	5,267 5,295 3,43 5,917 3,917	11,025 118,127 460 5,766 28,467 319,099	801 12,924 1,015 13,101	12,874 142,017 474 5,895 32,461 360,107	12,387 136,099 6,456 33,265 351,688	1,450 19,715 1,246 3,726 39,874	1,360 9,510 1,286 3,707	1,954 26 6,825 1 825 1 825 6 8,399 666,	" "	2,489 86,853 939 36,656 1,128 1,728	636 483 6,834 5,243 314 224 1,108 871 1,228 10,520		1997 10,051 193 115,455 146 4,797 114 26,613 245 292,176		9,827 78 4,545 89 4,545 79 27,256 82 282,028 81	2 83. 2 83. 1 80.	22,823 26,5623 26,5623 26,5623 26,5649 27,931	1,650 12,050 795 1,295 22,347	8,826 8,826 415 23,447 25,635	-	eeneam
Staten Island Rap, Tran. Bangor & Aroustook. Bessemer & Lake Erie.	Nov. II mos. II mos.	203 203 203 203 203 203 203 203 203 203	2,966 925 11,245 17,133	929	3,068 981 11,975 2,329 18,230	3,164 931 12,938 17,356	71 622 2,869 2,869 3,286	85 223 3,096 2,724	139 226 492 711	4.42 3.612 5.823 6.879 5,879	2624 2624 109 1,2 445 1,5	119 119 1235 335 335 4	24.2 33.9 41.9 41.9 4.8	1,726 3,171 286 851 3,726 10,888 3,99 1,899 4,678 16,884	01 51 88 11, 84 11,	274 109 126 103 909 86 279 90 316 77	86.7.7.88	2 1,347	1,008 Cr.212 3,046	2,669		0***0**-
Boston & Maine. CPR in Maine. Carolina & Northwestern.	Nov. II mos. II mos. I nos.	1,557 1,557 234 234 285	4,774 53,823 488 7,283 3,206	6,556 6,556 881 588	5,607 66,363 8,105 3,275	6,325 70,425 6,865 2,75 2,928		9,846 100 1,345 518	223 223 17 77		9,629 9,629 1,020 1,020 1,020 1,020	220 1,949 1,6 191 191 191 191	166 2,438 26 29,623 26 163 161 2,039 59 842	138 4,215 123 82,964 63 375 139 4,988 174 124		5,014 79 389 67 4,735 61 1,988 68 1,988	6,65,000	3 1,392 5 13,398 4 1,82 6 3,117 7 1,368	5,476 3,476 3,78 2,25 2,36	2,148 1,942 1,942 1,45		
Central of Georgia. Central of New Jersey.	II Mov.	1,745 1,750 3997 375 375	3,190 36,920 3,436 39,157 748 8,248	1,298 474 5,261 40 541	3,473 49,438 4,277 48,181 9,634	3,621 4,569 49,440 9,886 9,766	6,981 5,358 2,462	486 6,216 5,894 2,843	485 7 96 96 2019 8		7,199 2,9 7,199 2,9 7,56 1,8 8,440 1,8	194 176 1,930 1,75 1,930 1,845 827 1,845 827 193 216	76 16,019 74 1,995 77 23,411 81 3,866	111 2.924 119 83.994 95 3.415 111 40.543 672 666 8,184	24 33 33 41,3 41,3 94	024 438 84 461 791 77 629 84	88.88.88	5 5444 7 7 6,444 9 7,638 1 198 4 1,538	2,948	3,609		TO SIGNED
Chicago & Eastern Illinois Chicago & Hillinois Midland	Nov. II mos. II mos. Nov.	5,122 5,122 8,62 121 121	295,670 295,015 2,231 28,473 6,603	5,419	37,666 317,676 2,711 33,322 6,780	324,847 22,978 32,542 32,542 5,582	3,700 36,430 3,904 3,904 452	3,420 34,830 4,091 424	483 5,388 33 33 8 87	5,932 5,551 5,646 1,106 1,106 1,106	53.893 20,610 53.893 20,610 5,385 1,832 6,385 1,832 1,129 254	0 "	800 10,219 146 11,55 146 13,068 30 13,068 333 1,614	128	2963 231, 3553 231, 3655 25, 3655 3,	573 77 859 74 352 86 982 78 344 57 882 59	8 4 7 9 7 9 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9	6,368 2 81,713 2 358 3 7,198 3 2,788	35,489 35,489 2,488 1,571	50,555 2,212 2,212 1,119		-anna-s
Chicago & North Western Chicago, Burl. & Quincy Chicago Grest Western	Nov.	9.286 9.285 8.681 1.469 1.469	13,257 163,594 17,469 197,745 29,078	8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	16,086 197,098 21,423 240,458 31,318	17,161 22,184 234,433 32,101	2,575 31,833 2,698 3,369 3,43 4,551	2,541 29,645 39,712 5,676 5,676	4,057 296 6,366 6,366 8,366 4,666 4,666 4,666 4,666 4,666 4,666 4,666 4,666 4,666 4,666 4,666 4,666 4,	2,865 33,596 3,425 3,425 5,138 41,341 4,597 4,597 4,588	683 10,914 110 1,075 141 11,570 140 1,432	51 554 14 6,682 75 7,605 29 1,278	4 7,243 6 84,778 6 95,992 95,937 10,698	43 14,249 78 868,349 92 16,297 37 192,843 68 22,057	181	873 88 1127 85 710 76 709 80 878 72 275 70	8877-99 54877-99 74887-9	28,758 5,127 47,615 9,251	14.612 24.881 24.881 3.339	3,347 1,579 17,235 191 3,281	8,792 2,132 31,619 3,988	22222
Chic., Milw, St. P. & Pac. Chicago, Rock Is. & Pac. Cliachfield.	Nov. Nov. 11 mos. Nov. Nov.	10,599 10,593 7,524 7,536 293 293	14,523 185,730 12,855 168,686 1,751 19,179	1,131 13,818 1,359 15,134	17,755 222,269 15,965 201,915 1,758	19,514 223,856 16,639 189,925 11,925 19,246	24,834 21,867 26,486 2,391	2,844 2,285 3,264 2,285 2,586 2,586 2,586	244 244 359 359 359 359 359 359 359 359 359 359	3,268 3,268 3,368 3,545 3,545 3,545	3,282 905 38,599 8,784 3,642 647 32,547 6,973 3,550 1,174	84 6,211 84 6,211 87 6,107 85 6,107 73 6,107	29.590 1.89.590 6.839 80.300 4.824 4.824	15 447 92 183,039 39 183,039 00 156,835 42 1,104 24 12,213	155 1825 155 1825 155 1825 155 1835 155 1835 185 185 185 185 185 185 185 185 185 185 185 185 185	882 859 859 859 83 83 83 83 83 83 83 83 83 83 83 83 83	81.7 7 78.0 3 65.4 5 63.4	2,309 39,230 2,661 43,030 7,076	17.836 17.836 1.072 18.325 2.236	12,024 10,055 10,055 6,407	1.43 115,053 11,92 6,556	25555
Colorado & Southern. Ft. Worth & Denver. Colorado & Wysening.	Nov. II mos. II mos. II nos.	712 714 1.362 1.362 39	12,008 2,164 20,241 1,723	738	14,488 14,488 24,375 2,94 2,964	1,400 14,546 24,113 3,123	2,646 3,779 194	205 1,960 8,878 1,4 200	270 2 332 3 23 23 3	207 337 255 337 34 356	186 2227 851 851 868 368	8830 830 5046 8466 8466 8466 8466 8466 8466 8466 8	36 399 67 843 843 9,60 2 1.012	833 87 87 18,4 87 18,7 17,1	98 38 11 33 17 17 17 17	993 88 993 68 812 77 183 77 901 60	25.05.00 20.	1,970 1,970 5,496 1,149	1,177 273 1,730 698	163 930 938 381	1,318 1,627 1,627 4,33	0.000.00
Delaware & Hudson. Delaware, Lack. & Western. Denver & Rio Grande Western.	Nov. II mos. II mos. II mos.	764 764 941 2,128 2,138	3,542 39,091 4,152 49,445 63,805	1,417 1,417 8,157 2,698	3,817 5,647 65,669 6,351 68,921	3,981 5,938 70,874 6,544 70,455	4 5.574 7.555 7.55	378 915 717 864 853	2686 1586 1686 1191 1191 1191	7,738 7, 1,944 11,246 11,899	7.263 1.679 3.885 985 0.318 3.6	215 344 344 316 215 326 326 326 326 326 326 326 326 326 326	13 1562 11 1562 14 3418 14 22.34	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	227 227 227 32 32 32 32 32 46 46	895 75 499 76 515 91 954 87 150 62 689 67	54-54-64-64-64-64-64-64-64-64-64-64-64-64-64	9,953 9,953 8,952 2,393 22,351	4.693 7.469 1.465 12,455	5.700 2.289 -671 1.060	417-2	
Detroit & Toledo Shore Line.	Nov.	855 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	479 6,491 18,494 2,970 24,898		523 7,016 19,585 19,477 3,495 29,357	643 6,158 15,956 1,887 1,887 35,725	53 2,696 3,696 5,199	6.58 2.85 2.99 3.99 3.254	8.55 8.73 8.73 8.65 8.65 8.65 8.65 8.65 8.65 8.65 8.65	889 486 512 346 6.8	81 401 878 1.66 645 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	24 263 152 196 196 196	22 219 227 2.539 59 479 616 5.436 11 2.191 140 11,694	39 4.507 39 1.297 79 14.312 36 14.312 94 26,121	25.22.25.25.25.25.25.25.25.25.25.25.25.2	400 72, 185 64, 236 81, 578 73, 153 98, 488 89,	008826	2,589 2,588 8,165 3,236	1,433	3,601 3,601 2,401	3,824 2,824 2,824 3,072	000400
Duluth, South Shere & Atlantic	Nov.	544	5,992	2827	6,412	563	1,251	1,154	113	205 1,1	1,112 2	26 37	35 2,270	ati	473	426 89 163 84	888	1,025	396	452	486	

REVENUES AND EXPENSES OF RAILWAYS

(Dollar Agures are stated in thousands: i.e., with last three digits omitted)

MONTH OF NOVEMBER AND ELEVEN MONTHS OF CALENDAR YEAR 1959

8 0	Duluth, Winnipeg & Pacific . Nov. 175 483 483 9 175 683 7 9 176 683 175 683 7 9 176 683 175 68	Florida East Coast Nov. 572 23,628 468 668 Georgia Raliroad 11 mos. 321 6,127 171 Georgia & Florida 13 11 mos. 321 8,899 171 171 17 17 17 17 17 17 17 17 17 17 1	Grand Trunk Western 1 Nov. 931 44,774 246 Great Northern 1 Nov. 8291 14,774 2418 Creen Bay & Western 1 Nov. 8299 248,554 9.665 Green Bay & Western 1 nov. 829 279 288,554 9.665	Guif, Mobile & Chio Nov. 2772 6749 2499 Illinois Central Nov. 6762 8836 1846 Illinois 6461 203 818 20192 Illinois 7erminal 1 mos. 6461 203 818 20192 Illinois 7erminal 334 8702	Kanasa City Southern Nov. 891 3331 646	Lebigh & Hudson River 1 Nov 96 328 128 126 126 126 126 137 137 137 137 137 137 137 137 137 137	Long Island Louleians & Arkansas 11 Nov. 344 11,492 49,686 Louleistans & Arkansas 11 Nov. 746 21,712 451 Louleville & Nashville 11 Nov. 746 21,712 451 Louleville & Nashville 11 Nov. 5,695 185,467 7568	Maine Central Nov 936 1.983 9.38 Minneapolis & St. Louis Nov 1.391 1.55 862 Minn., Northfield & Southern 1.709 1.77 8.885	Minn, St. P. & S. Ste. Marie Nov. 3222 34,944 93 Missouri Illinois Nov. 3222 34,93 667 M-K-T Lines Nov. 2918 38,93 77 H mes. 72 143 72	Missouri Pacific (1978) 1978 1978 1978 1978 1978 1978 1978 1978	New York Central 1 Nov. 16,484 46,485 5,556 6 1 Nov. 16,484 15,556 6 1 Nov. 221 25,483 15,556 1 Nov. 721 25,483 18,53 New York, Chic. & St. L. Nov. 221 27/9 11,796 99 1 1 Nov. 21,72 17,966 1 Nov. 21,72 17,966 1 Nov. 21,72 17,966 1 Nov. 21,72 1 Nov. 21,	New York, N. H. & H. M. Nor. 1762 57, 38,559 1, 452 1 Now York, Sua. & Western 1 Nov. 21 3, 201 15 Nov. 21 Nov. 21 1, 201 1, 201 15 Nov. 21 1, 201 1,
Revenues Total (inc. misc.)	27.12.0	2,542 2,946 505 7,246 7,294 7,296 2,265 3,026 3,129 3,026	3,323 4,331 51,993 47,569 23,514 231,739 33,514 231,739 4,369 4,203	6,831 6,81,73,73,73,73,73,53,53,53,53,53,53,53,53,53,53,53,53,53	3,737 3,663 41,793 38,899 4,976 4,398 461 4,100	258 3,633 2,982 491 5,580 4,480 4,480 5,280 4,677 52,888	5.767 5.46. 63,400 62.307 23,87 1 991 18,920 19,251 208,817 206,510	22,512 22,926 1,593 1,689 19,866 26,762 3,997 4,226	3,253 39,867 39,222 39,867 811 4,824 4,393 4,845 83,990 55,966	23 683 24,654 277,994 266,197 1707 1722 18,490 18,301 4,768 4,213	54 663 56,432 52,641 595,742 2,162 2,492 12,346 12,393 135,483 128,746	111,242 131,860 286 3,544 3,788 3,788 3,788 3,788 3,788
Maint, Wa	1,246 1,246 3,022 1,268 15,862	4,457 4,457 1,031 786	2,858 2,838 36,989 36,989 35,37	1,018 10,162 2,3,094 3,321 3,321 1,159	3,138 3,633 6,33 8,47 8,44	312 312 518 671 5,818 6,	3 8,867 144 2,076 2,076 27,712	3,071 3,071 3,071 24 266	8,071 7. 8,071 7. 485 447 5,772 5,8	3.294 3.405 38.104 38.937 2.07 2.655 7.701 2.655 7.49 7.25	5,381 5,816 65,858 64,279 307 238 3,958 4,385 1,247 1,204 14,872 14,209	1,575 16,439 16,439 16,359 17 895 1,298 17 35 436 436
ay and Struc Deprec. and fotal Retire.	2.897 313 1,156 239 15,327 2,519	535 535 535 535 936 58 68 68 61 51 51 51 51 51 51 51 51 51 51 51 51 51	546 862 745 8027 656 3,733 775 81	980 3,108 33,463 4,451 83 1,248 36	284 64 958 550 52 8 703 83 43 115	33 374 69 77 743 77 743 77 6,613 1,086	862 146 8727 1,178 2,012 227 2,007 3,666	331 277 317 327 32 32 24 25 25 26 26 26	688 51 62 62 707 583 432 142 5,889 1,017	105 366 337 3,806 169 20 555 233 164 139	11.0 11.105 338 78 719 855 719 160 1,778	288 288 668 3,191 288 279 385 279 56
Total	54 646 646 7,186 2,262 23,734	6,003 1,352 1,352 440	10.038 3.766 43.738 498	45.917 4.999 45.585 1.994	5,778 389 389 56	3.28 1.888 3.368 3.368 3.368	12.105 12.105 3.354 3.754 42,633	3, 429 3, 429 446	7,458 73 950 850 11,172	4,136 47,840 47,840 3,339 54 601	120,100 120,100 9,236 1,931 22,299	19,598 19,598 112 146 538 879
aint. Equi		5,987 1,205 44 404	836 3,816 41,816 933	1,181 3,449 3,430 43,129 9,670	5,446 3,39 3,08 7,11	405 136 136 941 9,512	11,889 234 3,131 1,412 12,819 12	4,089 3,309 4,25	6,998 1 930 1,944 10,866 2	3,783 15,088 11, 3,114 5,97 5,97	9,700 26,500 26,500 26,764 5,20,764 5,	1,778 20,964 5, 178 52 891
g Expenses -	13 82 13 85 122 45 178 491 558 361 ,037 4,013	35 443 379 443 379 443 10 230	109 101 214 1.046 894 558 894 558 99 27 96 310	303 299 301 3,327 802 656 221 7,021 31 46	113 201 12 33 131 35 2 345 245 24	8 92 170 41 153 165 1,534 759 1,534	1,856 489 1,856 489 1,082 882 1,169 696 2,367 5,657	84 29 921 346 101 119 .076 1,317 13 341	1,558 1,237 40 13 423 149 262 185 2,877 2,013	1,100 699 1,965 7,573 844 1,116 121 10	2,464 11,560 3,580 7,887 4,77 3,892 5,120 3,892	512 261 5,174 2,675
Trans.		3,420 3,420 993	2,130 7,520 82,723 124 1,354	25,438 95,446 95,232 3,872	12,776 1,041 1,041 1,059	1,225 2,312 2,312 2,275 2,275	3.924 32.028 668 7.459 7.253	731 8,519 7,636 1,637	15.576 15.576 1.422 1.591 19.634	9,455 107,152 669 7,464 1,818	26,117 295,884 925 11,990 4,600 51,550	5.819 64,666 88 946 178 1,879
Total	350 4,096 2,359 30,174 10,412	25,283 25,193 6,660 2,20 2,701	3,925 47,528 15,641 3,80,959 3,146	5,341 57,734 17,572 195,469 8,179	2,165 24,190 2,750 2,852 2,822	2,117 5,817 5,822 8,8,590	5.019 55.827 1.290 14.528 14.501 167,244	1,590 1,397 16,453 2,562	34,622 34,622 3,153 6,400	18,542 211,702 1,453 15,686 3,365	46.528 226.528 27.258 27.253 97.924	10,354 113,626 1,938 3,333
Total 0	=4-440	25,437 25,823 6,264 9,264 2,569 8,284 8	4,122 118 45,567 91. 15,686 77. 75,339 77. 3,170 73.	5.197 7 58.049 7 17.127 7 90.334 7 8,068 8	2,074 22,773 2,656 2,656 2,593 7	2,302 75 486 103 5,418 100 4,286 85 48,045 89	54,906 8 54,380 8 14,224 5 11,224 5 115,787 7	1,588 89, 18,686 81, 16,194 83, 2,336 62,	32,956 93 3,263 51 3,263 66 3,537 75 41,865 74	18,447 78 204,431 85 1,431 85 15,443 84 3,182 70 3,182 70	46.766 85. 29.199 84. 29.658 100. 8.322 69. 94.244 71.	16,026 92 14,491 96 1,370 54 3,378 86 3,410 90
Operating	88.00.00	89.8 89.8 89.3 89.3 86.3 86.3 86.3 86.3 86.3	2332295	78.2 76.3 776.8 79. 778.8 78. 777.1 75.	557.9 558.9 558.3 558.3 79.0 63.3 65.3 66.3 66.3 66.3 66.3 66.3 66.3	5 983.73 5 987.73	87.0 89.1 87.0 89.7 6.6 64. 83.	83.7.7.88 6.5.7.7.88 5.5.4.88 5.5.4.88	86678	22-849 477-883-98	86.35.98	25.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00
Net from railway		4,6899 26,6899 26,6899 4,589	8 4,632 4,632 4,632 8 8,632 4 1,153	3 1.498 1 7.698 1 52.543 1 196 1 .594	1,573 6 17,512 3 2,226 2 752 752	868 3 23 2 24 8 5,172	2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3,347	222 4,606 2,606 2,045 11,099	5,141 66,202 2,554 2,804 1,403	8,081 158 158 3,753 38,559	18,246 1,696 772 367
Rallws Y Cax	45 478 295 4,913 1,829 12,917		4,359 2,324 28,792 44 561	7,940 27,894 27,894 392	7,334 87 959 423 489	347 347 387 387 5,069	4, 4334 2,4554 30,4558 30,4588	2,178 1,886 66 843	2,052	22,374 1,105 1,107 1,27 189	63,810 63,156 428 4359 11,533	10,948 972 972 35 360
	1,737 1,737 -565	361 361 32	2,086 20,489 20,489 248	5,012 1,538 17,192 18	7,324 795 140 423	9578	8848 3,111 1,901 16,735	1,873 1,839 1,339 5,86	1,620 1,126 1,128 3,703	2,242 29,569 1,065 67 630	18,428 7,623 7,623 15,673	8,146 8,146 370 370 437
400.	88 511 1,912 1,843	1,194 121 783 25 303	7,839 2,720 23,818 267	453 2,324 19,969 87 942	7.027 888 122 775	3,092	1,808 326 2,914 1,665 17,068	1,575 1,875 1,844 1,844	3,166 786 4,136 4,136	3,138 30,583 1,014 225 225	3,632 7,710 7,710 6,704 13,611	3,426 174 431 336

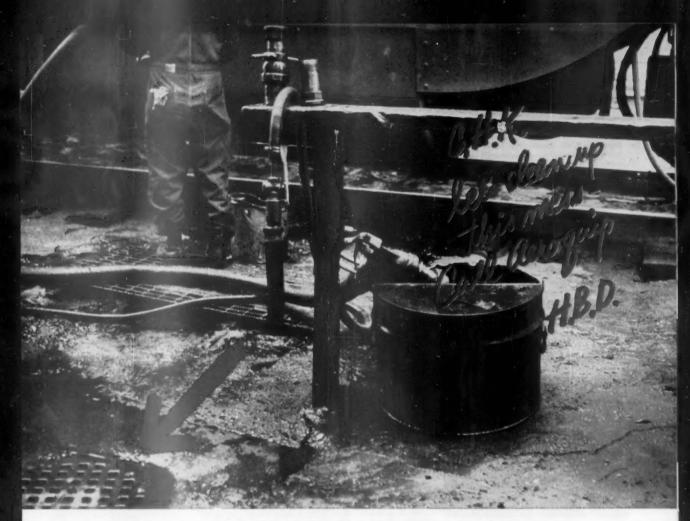
RAILWAY AGE

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands: i.e., with last three digits omitted) MONTH OFINOVEMBER AND ELEVEN MONTHSLOF CALENDAR YEAR 1959

Road	ABOD o	Freigh	P P	Revenues Total (inc. 1959	misc.) 1958	2	Way and D Total F	Deprec. Deprec. and Retire- ments	a	Operation for. Equ Total B	dpment eproc. and tettre-	U	Trans-	Total 1959		Operal ratio	0		Rallway tax accruals		Rallway rating come 1958
Norfolk & Western II mos. Norfolk Southern II mos. II mos. Northern Pacific. II mos.	2,137 2,138 592 593 6,834 6,830	172,108 172,108 8,914 12,256 151,740	2,282	183,154 835 9,064 183,770	16,642 186,580 8,519 14,767 164,418	14 14			(65	1			50,323 268 268 2,917 5,716 65,320	10,092 113,948 668 7,733 10,868 134,980	9,588 124,183 1-7,404 130,454	62.5 57.6 62.2 66.6 86.0 85.6 85.3 86.9 79.7 79.3			2,434 35,405 88 866 2,655 23,127	47,097 47,097 66 376 13,266	4,804 57,466 11,256 15,955
Northwestern Pacific I Nov. II mos. Pacific Electric I Nov. II mos. III mos.	328 328 358 358 360 360 360 360 360 360 360 360 360 360	1,015 12,819 845 11,137 56,578 616,686	8,105 94,615	1,020 12,923 971 12,716 74,766 810,853	919 11,135 11,673 74,779 773,337	2,349 2,045 2,045 6,904 78,886	208 ,690 1,845 6,596	1.29 256 28 266 1,478 16,046	75 894 55 598 14,011 14,011 62,010	70 881 60 586 13,551 50,295	2,625 39,2,625	10 89 20 229 1,085	1,307 3,730 511 6,232 87,563	1635 7,337 898 10,231 58,205 665,859	7,523 9,425 59,143 656,457	62.3 56.8 92.6 80.5 777.8	67.0 67.6 83.3 80.7 79.1	384 5,586 2,484 16,562 44,993	2,148 1,489 5,598 62,657	76 1,244 213 5,085 26,691	- 574 - 100 - 267 4,901 10,967
PennReading S. S. Lines Nor- Pledmont & Northern II mos. Pittsburgh & West Virginia Nor. III mos.		5,156 5,144 7,673	1,071	7,455			2,203 2,203 540 540 139 1,497		1	1,353 1,353 317 317 1,649	284 284 105 499	94 343 343 797	5,363 993 993 2,332	9,823 2,631 2,631 7,174	9,548 1 2,436 2,436 7,048 1	30.0 1 48.0 50.1 86.7	238.0 26.7 551.5 95.9	2,524 2,624 2,624 2,524	807 801 345 7	441 441 732 732 202	4,494
Reading, 11 mos. Richmond, Fred. & Potomac, 11 mos. Rutland, 11 mos.	1,303 1,303	7,858 84,657 1,170 13,708 3,932	5,482 305 4,376	9,011 97,251 1,851 21,699 381 4,225	9,114 97,315 1,925 21,929 4,226	1,049 12,285 1,659 1,659 842	939 12,723 1,775 807	2,139 1 2,139 1 251 251 93	1,864 18,892 3,212 6,2 6,3	1,686 17,528 2,66 3,072 6,25 6,25	5,247 2 73.0 118	2,099 2,099 316 329 322	4,040 63,678 7,692 1,734	82,850 14,274 14,510 3,854	7,098 81,562 14,284 14,711 3,796	288386 48836 648634	83.8 66.7 67.1 89.8	1,444 5,201 7,189 376 371	4,646 4,284 4,284 33 33	2,093	1,143 8,479 2,393 75
St. Louis-San Francisco Nov. St. Louis-S. F. & Texas II mos. St. Louis Southwest. Lines II mos.	4,558 4,567 143 1,556 1,556	9,212 100,298 4,437 4,771 59,001	2,386	110,229 110,781 4,720 4,872 60,650		1,441 16,891 297 522 6,386			1,725 18,785 1999 778 7,590	1,755 17,763 24 266 494 7,358	6,672 3 6,672 3 113 185 2,105	378 3,921 252 252 182 182	43,645 147 1,670 1,830 19,865	89,648 89,222 2,648 3,496 38,677	7,943 84,802 2,752 3,083 37,017	78.9 53.0 56.1 71.8 63.4	880.4 81.4 67.8 87.3	21,189 21,163 2,072 1,376 21,973	8,289 9,955 9,956 9,987	1,103 0,677 1,855 616 9,439	315
Savannah & Atlanta 11 mos. Seaboard Air Line 10v. Southern Railway 11 mos.	200 200 444 444 444 444 444 444 444 444	3.581 11.299 123.662 19.326 218,598	864 11,656 9,559	3,746 13,746 13,344 146,731 21,994 246,816	3,549 3,541 13,116 140,842 22,749 232,538	51 1,617 18,636 12,451 30,893	59 645 19,917 3,322 34,279	3,835 3,835 3,835 4	2,663 27,128 3,394 41,260	57 634 2,557 28,125 4,021 10,127	212 732 7,766 969 9,470	16 183 498 494 5,405	1,274 4,971 53,208 1,962 78,145	262 2,861 10,422 11,556 169,435	2,789 10,126 112,387 15,669 169,864	78.1 76.1 66.5 68.6	77.3	8886 2,932 35,932 77,337 37,382	334 3,334 3,346 3,346 3,346 3	26 428 17,298 17,298 35,586 3	1,618 6,452 3,428 3,360
Alabama Great Southern	328 338 337 397 397	13,057 2,571 33,069 8,024	473 473 887 346	15,293 15,883 2,869 36,237 9,244	1,353 14,346 3,946 33,962 947 8,781	2,563 2,563 6,419 87 1,390	2,748 645 6,670 1,524	463 120 891 134 134	3,443	3,321 7,483 881	82 901 223 2,447 10 116	448 845 896 23 23 253	5,364 5,364 9,623 2,957	12,996 2,640 26,826 494 6,132	1,188 12,858 2,489 26,695 6,281	887.4 885.2 774.0 6.3 85.2 85.2 85.2 85.2 85.2 85.2 85.2 85.2	887.9 887.9 881.6 89.7 71.5	2,088 429 9,411 200 3,111	1,047 2311 4,339 710	643 380 380 25 520 598	330 713 693 4,971 38
New Orleans & Northwestern 1 Nor. 11 mos. Southern Pacific. 1 Nov. Texas & New Orleans. 11 mos.	203 203 203 8,066 4,0993 4,157	745 9,222 35,579 451,742 9,863 118,676	347 1,864 24,532 3,200	841 10.388 39.968 505.476 10.719	1,044 10,543 41,186 469,336 11,947 123,738	22,206 55,007 21,732 21,732	231 5,366 8,127 0,373	56 315 681 5,913 11 5,694 1	2,185 0,255 1,719 1,719 1,719 1,719	2.173 9.774 9.774 1.670 17,614	936 2,536 7,257 8,189 2,189	27 298 751 1,729 19 254 19 4,790	258 2,838 16,943 4,141 47,296	8.391 34.551 94.680 97.198	8.866 34.594 378.677 92,742	28.88 28.4.88 778.1.9 75.5	76.1 94.9 94.9 72.4 11	1,998 5,417 10,796 31,468	1,496 3,196 56,156 4,57 12,641	48 13,939 6,751	1,299 3,694 12,185 6,858
Spokane International Nov. Spokane, Portland & Seattle. I Nov. Tennessee Central II mos.	180 936 936 284 284	3,683 3,683 3,683 3,645	124 T	3,247 2,724 31,503 3,821	2,22 2,566 29,690 3,718	6.9 5.929 4.929 485	38 483 483 484 48 461	5755	291 291 5.150 5.64 564	246 3466 439 5,060 51 548	111 129 .413 237	55 35 35 15 184	826 11,174 11,493 1,337	1,840 2,214 23,283 26,283 2,832	2,007 2,007 22,577 2,771 2,771	68.8 56.7 73.9 74.1	288.9 79.2 75.7 75.5	8.221 8.221 9.89	Cr. 249 2,638 2,638 263 263		52 636 3,565 20 261
Texas & Pacific Nov. Texas Mexican I mos. Totedo, Peoria & Western II mos.	1,828	57,586 3,982 3,982 6,913	3,535	5,961 67,883 3,336 7,164	6,315 66,245 245 3,411 6,814	830 9,103 89 664 56 846	792 856 626 850 850 850	1,121 1,121 68 68 7 75	1,112 1,691 345 345 56 570	1,043 11,634 36 379 49 69 581	281 1,024 2, 11 125 142	223 386 13 136 53 53 58	2,486 28,145 985 175 1,893	5,019 2,289 2,415 4,339	4,878 23,279 2,345 4,146	884.2 72.6 69.8 60.6 60.6 60.6	777.2 889.4 885.2 685.9	943 12,594 918 2,825	4,911 15 392 392 1,221	83.5 13.5 83.5 83.5 83.5 83.5 83.5 83.5 83.5 8	25,24,88
Union Pacific 1809. Virginian 1809. Wabash 1809. 11 mos.	9,743 9,747 2,392 2,392	36,133 411,899 3,261 40,418 7,846 94,425	25,465 25,465 4,693	41,026 471,675 3,368 41,983 9,311	44,214 660,596 4,153 45,687 9,667 102,737	56,036 58 396 58 5,236 4 1,013 1	3.894 58.085 441 4.940 1.973	6,181 69 878 878 355 1,673 15	7,315 84 474 7,347 7,347 7,547 7,547 7,549 1,219	8,143 14,796 24 556 3,7,250 3,864 4,864	3,335 14,396 13,117 3,117 467 3,960 3,	1,250 3,559 16 69 694 694 345 3,821 5	14,757 65,762 8,776 4,447 51,095	29,906 347,712 3,579 7,474 88,554	30,398 338,322 2,098 23,272 7,882 84,181	272.72.98 886.23.9 886.23.9 888.83.9	58.8 56.5 56.5 56.9 18.9 18.9 21.9	962 836 656	5,915 67,979 8,895 7,356	3,304 1,249 12,476 12,476 12,673 5,602 8	5,751 40,640 12,795 12,795 8,373
L Ann Arbor 11 Nov. Western Maryland 11 mos. Western Pacific 11 mos.	294 2794 1,188 1,188	7.84.2 3.4.29 3.75.7 45.64.1	16 26 2,127	8,945 3,588 4,973 49,973	8.832 8.832 4.635 67.421	12821 12821 13821	77 884 461 627 545 ,189	544 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	161 821 821 877 693 7,615	138 659 863 387 524 287	44 293 293 201 102 102 201 201 201 201 201 201 201	36 381 112 346 1235 15	361 986 219 763 673 815	657 3,024 3,024 3,224 37,656	2,896 31,395 33,395 35,711	96.4 884.5 76.7 76.7	87.9 87.8 71.1 75.5	25 686 557 643 455 417	58 624 351 124 730 5	54 591 591 5,669 6	324 962 791 791
Wisconsin Central11 mos.	1,031	27,610	267	29,681	29,528	344 3,	310	485 4	338 4,	1,767 1.	1,198 1.	105	2,950	24,555	23,725	87.3 8	85.6	306 3,126 2	1,167	897 2	2,117

O



Here's Where Oil Pollution Starts

FUEL SPILLAGE AND COMMUNITY DRAIN AND WATER SYSTEMS DON'T MIX

Spillage of diesel fuel at the loading platform can lead to serious community relations problems. Community sewage systems have been found to present a dangerous fire hazard from oil pollution many city blocks away from the fueling platform. Sewage disposal plants have claimed faulty operation due to oil pollution. In rural areas where overflow into streams has occurred, health hazards to livestock and humans have resulted. In many cases, due to the use of inadequate fueling devices, railroads have been forced to spend large sums on concrete platforms and oil separation facilities in an effort to solve these problems. However these do not solve the problem at its source.

The best answer is the Aeroquip Automatic Fueling Unit. It is designed specifically to eliminate fuel spillage and overflow during refueling operations. Last

year, class I railroads lost approximately 1% of their fuel in this manner. They paid a staggering 3 million dollars for fuel that was wasted.

The Aeroquip Unit provides full tank fueling at high flow rate. Hand-topping is eliminated; shut-off is automatic. Manpower needs are reduced. The unit installs in less than two hours on any diesel locomotive. Maintenance by railroad personnel is simple. Write for information-

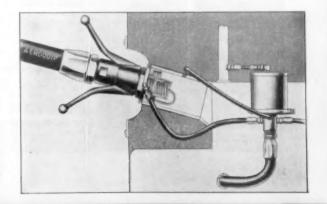
Solve This Problem with the Aeroquip Automatic Fueling Unit



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INDUSTRIAL DIVISION, VAN WERT, OHIO « WESTERN DIVISION, BURBANK, CALIFORNIA AEROQUIP (CANADA) LTD., TORONTO 19, ONTARIO

AEROQUIP PRODUCTS ARE FULLY PROTECTED BY PATENTS IN U.S.A. AND ABROAD



People in the News

ALASKA.-A. R. Sessions and Edwin M. Fitch appointed assistants to general manager, Seattle, Wash., and Washington, D. C., respectively.

Herbert R. Phillips, superintendent of stores, Anchorage, appointed superintendent of pro-curement and supply. John W. Miles, general procurement officer, Anchorage, retired.

Fred W. Hoefler appointed traffic manager rates and tariffs, Anchorage. C. Phillip Hibdon named traffic agent, Anchorage,

ATLANTIC COAST LINE.-Ben H. Brown, traffic manager of the Charleston & Western Car-Augusta, Ga., appointed assistant freight traffic manager, ACL at that point. Headquarters of J. W. Hawthorne, chief mechanical officer, transferred to Jackson-ville, Fla., from Wilmington, N.C.

J. Councill appointed general industrial geologist and J. F. Johnston named general industrial forester, Wilmington.
J. D. Toylor and J. E. Johnson appointed as-

sistant general freight agents and J. R. Fisher

Frederic W. Somerton CNR



lan D. Sinclair



J. A. Wright CPR



H C White CofG



E. Candler Jones CofG



Francis S. Norton REA

named assistant to general freight agent, Wilmington.

BALTIMORE & OHIO.-Herman C. freight representative, Dayton, Ohio, appointed district freight agent, Hamilton, Ohio, succeeding William Carder, Jr., transferred to Omaha, Neb.

BURLINGTON.-Alvin E. Egbers, staff officer of the labor relations department, named to the newly created position of director of labor

CANADIAN NATIONAL.-Frederic W. Somerton, assistant chief of transportation, Montreal, appointed assistant to vice president of operation at that point, succeeding W. Turnbull, retired.

Marshall J. Nickerson, terminal construction engineer, Moncton, N. B., appointed engineer of construction, Atlantic region, succeeding Robert Keays Delong, retired.

G. L. Galloway, superintendent motive power and car equipment, Toronto, ap-pointed assistant general superintendent of motive power there, succeeding William D. Piggot, appointed regional work study officer, Toronto. R. M. Voonis, superintendent of motive power and car equipment, Montreal, transferred to Toronto, succeeding Mr. Galloway. W. J. Notley, superintendent, Stratford shops, succeeds Mr. Veenis. Walter Wynne, assistant superintendent work equipment, Toronto, succeeds Mr. Notley.

Edward P. Ronayne, trainmaster, New Glasgow, N. S., appointed assistant superinten-dent, Bishop's Falls Nfld., succeeding T. J. Cleary, retired. James H. Pike, acting train-master, Bishop's Falls, Nfld., named trainmaster, Moncton, N.B., succeeding R. Lyall Stoewes, who replaces Mr. Ronayne at New Glasgow.

CANADIAN PACIFIC .- Ion D. Sincloir, general solicitor, Montreal, appointed vice president and general counsel, succeeding F. C. S. Evans, retired.

J. A. Wright, assistant general solicitor (east), Montreal, promoted to general soli-citor, F. S. Burbidge, solicitor, named assistant general counsel.

CENTRAL OF GEORGIA.-H. C. White, general freight traffic manager, Savannah, Ga., appointed chief traffic officer, succeeding the late H. M. Croghan, vice president—traffic (title abolished). E. Condler Jones, freight traffic manager, succeeds Mr. White. Edward J. McCoffrey, freight traffic manager, promoted to assistant general freight traffic manager. Charles T. Hopkins, assistant freight traffic manager, promoted to freight traffic manager, succeeding Mr. Jones. James F. Mc-Komio, assistant general freight agent, Birmingham, Ala., named assistant freight traffic manager, Savannah, succeeding Mr. Hopkins. George W. Stradtman, general agent, Savannah, promoted to assistant freight traffic manager, and his former position abolished.

CHICAGO & EASTERN ILLINOIS.-H. R. Samp son, senior vice president, E. F. Koncel, land and tax commissioner, E. I. O'Connor, general attorney, and J. E. Andre, special assistant, traffic department, retired Jan. 31.

CHICAGO & NORTH WESTERN.-Harvey H. Motzer appointed general freight agent-divisions, Chicago. Charles D. McGehee named assistant general freight agent-

meter common carrier division. Chicago. John F. Dueschler, general industrial agent. Chicago, who retired Feb. 1, died Feb. 6.

COTTON BELT.—James A. Bailey appointed assistant general freight agent, Tyler, Tex.

DENVER & RIO GRANDE WESTERN.-R. J. Schneider appointed district freight agent, Chicago.

ELGIN, JOLIET & EASTERN .- V. C. Christensen, superintendent, Gary division, appointed superintendent, South Chicago. W. A. Ferguson, superintendent of transportation, Gary, Ind., named superintendent, Gary division-except South Chicago, to replace Mr. Christensen.

ERIE.-Milford M. Adoms, assistant to comptroller, Cleveland, promoted to assistant comptroller, succeeding Frank A. MacEwen, who retired Jan. 31. Joseph E. Keenan, special accountant, succeeds Mr. Adams.

Herman G. Violand, assistant to vice president-operations, Cleveland, retired.

GRAND TRUNK WESTERN.-Woring A. Eddy, superintendent of terminals, Detroit, appoint. ed superintendent, Chicago division, Battle Creek, Mich., succeeding Albert G. Thernstrom, retired.

GREAT NORTHERN.-K. G. Heimbach appointed director of truck and trailer-on-flat-car sales.

GULF, COLORADO & SANTA FE.-Lawrence Cons, trainmaster, Brownwood, Tex., transferred to Fort Worth, Tex., to replace H. D. Fish, promoted to superintendent, Eastern division, Santa Fe, Emporia, Kan. Mr. Fish succeeds W. R. Henry, named assistant general manager, GCSF, Galveston, Tex. C. F. Stanford, Jr., trainmaster, Galveston, named to replace Mr. Cena, and in turn is succeeded by A. N. Wode, transferred from Temple, Tex. M. B. Adams replaces Mr.

JERSEY CENTRAL.-Peter R. Broadley, director of research, locomotive development com-mittee, Bituminous Coal Research, Inc., Dunkirk, N. Y., on leave of absence from the Jersey Central since 1947, recently returned as assistant to vice president and general manager. Mr. Broadley had been mechanical engineer when he left the Jersey Central.

James L. Duly, assistant district attorney for New York County for 17 years, ap-pointed attorney for the Jersey Central at New York.

LACKAWANNA .- J. C. Custle, auditor disbursements, New York, promoted to assist-ant comptroller there, succeeding John H. O'Neill, named comptroller of the Delaware & Hudson. D. J. McIntyre appointed assistant to comptroller. N. E. Shey, assistant auditor disbursements, Scranton, Pa., named auditor of disbursements there.

LOUISVILLE & NASHVILLE.-H. C. Formon appointed assistant vice president, Birmingham,

C. F. Brotton named assistant comptroller, J. J. Miranda, assistant to comptroller, and J. M. Taylor, general statistician.

MILWAUKEE.-Francis W. freight traffic manager, New York, appointed traffic manager there. Steven E. Pilson, division freight agent, Milwaukee, Wis., named general agent, New York, replacing Raymond F. Kelcher, appointed assistant to traffic manager, New York. Edgar W. Chesterman, director of Flexi-Van service sales, appointed manager, rail-highway sales, and Douglas A. Keller, traffic analyst in the traffic research department, named assistant manager, railhighway sales, both at Chicago.

W. F. Bennon, assistant superintendent, Coast division, Tacoma, Wash., appointed assistant superintendent, Chicago Terminals, Bensenville, Ill.

Harry Belond, March 1. AAR inspector, retires

Cormoc P. Cossidy, division freight and passenger agent, Des Moines, Iowa, transferred to Davenport, Iowa, to replace Richard Cosey, named division freight agent. Milwaukee, Wis. A. Stanley Price, division freight and passenger agent, Miles City. Mont., named to succeed Mr. Cassidy, and in turn is succeeded by George F. Flynn, district freight and passenger agent, Spokane, Wash. Mr. Flynn's successor is Wallace G. Orr, general agent, Indianapolis, who in turn is replaced by William P. Morton, division freight and passenger agent, Great Falls, Mont. too F. Walsh, division freight and passenger agent, Sioux City, Iowa, succeeds Mr. Morton, and in turn is succeeded by Howard A. Springer, traveling freight agent, Milwaukee. Goorge V. Valley, general agent, Portland, Ore., appointed district freight and passenger agent, Salt Lake City.

MILWAUKEE MOTOR TRANSPORTATION CO.-Roy R. Miskimins, manager, and Robert H. Hurst, appointed assistant vice presidents, Portage, Wis. Mr. Hurst was formerly associated with Canadian Fleetlease, Vancouver,

MISSOURI PACIFIC.—Richard J. Haley, commercial agent, Cleveland, appointed general agent, Sedalia, Mo., to replace the late J. F. Downs.

NEW HAVEN .- Arthur J. Beauton has returned to the New Haven as assistant comptroller. Beauton retired as deputy comptroller in 1958 and in the interim has been under contract to the U.S. State Dept. as railroad finance and management advisor to the government of Vietnam.

NEW YORK CENTRAL-John P. Bunnon appointed assistant coal sales manager, New York, Dongld J. Wyman, district freight salesman, succeeds Mr. Bannon as district coal sales manager.

Grover C. Kelly, acting assistant to general manager-labor relations, Boston, Mass., appointed assistant to general manager—labor relations there. John P. Burton named supervisor wage schedules, Boston.

John L. Niesse, general superintendent of communications, New York, retired.

W. D. Toylor, acting master mechanic, Indianapolis, Ind., appointed master mechanic, Buffalo (N. Y.) division. Ernest A. Anesi, assistant master mechanic, Harmon, Y., appointed master mechanic, Toledo,

NORFOLK & WESTERN.-Eurie P. Petticrew, assistant freight traffic manager, Roanoke, retired Jan. 31.

NORTHERN PACIFIC .- R. L. Johnson, division storekeeper, Tacoma division, Seattle, Wash., appointed district storekeeper, coma, Wash., succeeding R. F. Blukeslee, promoted. E. K. Beats, division storekeeper, Yellowstone division, Glendive, Mont., suc-ceeds Mr. Johnson. R. G. Becker replaces Mr. Beals.

NORTHERN PACIFIC TRANSPORT CO .- N. K. Sankovich, supervisor of maintenance, Billings, Mont., named assistant superintendent of western operations. Seattle, to succeed C. W. Hawkes, appointed to the newly created position of superintendent of western operations, Tacoma, Wash.

PEABODY SHORT LINE.—C. V. Campbell, vice president, East St. Louis, Ill., retired because of ill health. W. A. Benton, freight agent, appointed general traffic manager.

PENNSYLVANIA.—Louis T. Henderson, manager-public relations, Northwestern region, Chicago, promoted to area manager-public Northwestern and Southwestern

Ernest L. Wogen, assistant manager-freight rates, Chicago, promoted to manager-freight rates there, to succeed the late Philip G. Barenbach (RA, Jan. 25, p. 36). Kenneth G. Crowl, assistant manager-freight rates, Phila-

delphia, named to succeed Mr. Wogen. William Glavin, district engineer, Harrington, Del., named district engineer, Chicago.

RAILWAY EXPRESS AGENCY .- Francis S. Norton, former general traffic director of Fisher Body Division, General Motors Corp., appointed assistant vice president—traffic of REA, at Detroit, Mich.

READING.-Frederick J. May, assistant super-intendent, car department, Reading, Pa., promoted to superintendent, car department, succeeding Harry F. Lyons, retired. Joseph E. Dermer, general foreman, freight car shop, Reading, succeeds Mr. May. Franklin L. Groh, assistant superintendent, Reading car shop, promoted to superintendent there. William C. Spang, general foreman, passenger car shop, Reading, named assistant superintendent, Reading car shop.

(Continued on following page)



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Here is all the convenience and advantage of a mile-long ice dock...without the prohibitive installation costs. And you can relocate anytime as needed quickly and easily.

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OSMOSE Inspection and Treatment of in-place bridges and trestles is a thorough "top-to-bottom" operation. Pilings, framing, caps, stringers, ties, guard rails and underdecking are carefully checked. Drift pins, brace bolts and hard-to-get-at places are given extra attention with special OSMOSE-developed techniques.

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PEOPLE IN THE NEWS (Continued from preceding page)

SANTA FE.-D. L. Quaney, master mechanic at Los Angeles, transferred to Chicago; E. B. Wood, master mechanic at Winslow, Ariz., succeeds Mr. Quaney at Los Angeles; J. F. Kanive, assistant superintendent locomotive shops, San Bernardino, Cal., succeeds Mr. Wood at Winslow; G. F. Syitcovich, general foreman, Chicago, succeeds Mr. Kanive at San Bernardino: K. A. Wolfe, assistant night roundhouse foreman, Barstow, Cal., succeeds Mr. Sgitcovich at Chicago.

SAVANNAH & ATLANTA.-Dr. John G. Sharpley appointed chief surgeon, Savannah, Ga., suc. ceeding Dr. C. F. Holton, retired.

SEABOARD.-G. W. Nichols, commercial agent, appointed district freight agent, Pompano Beach, Fla.

SOO LINE .- V. Emigh, terminal trainmaster, Schiller Park, Ill., appointed terminal superintendent there, succeeding R. O. Jensen, who retired Jan. 3l. C. W. Siebold named to replace Mr. Emigh.

SOUTHERN .- Clark Hungerford, Jr., superintendent, New Orleans & Northeastern, Hattiesburg, Miss., appointed superintendent, Alabama Great Southern, Birmingham, Ala., succeeding Winfred L. Thornton, who has been named chief operating officer of the Florida East Coast at St. Augustine, Fla. James A. Johnson, superintendent, Knoxville, Tenn., transferred to Selma, Ala., succeeding William L. Hofmann, transferred to Hattiesburg. James W. Gessner, trainmaster at Asheville, N. C., promoted to superintendent, Macon, Ga., succeeding Terence O'Brien,

transferred to Knoxville. Walter W. Simpson, Jr., manager, Coster Shop, Knoxville, appointed superintendent of motive power of the system at Knoxville, succeeding Loland C. Shults, who retired Dec. 31. Manley H. Hammett, master mechanic, Spencer, N. C., succeeds Mr. Simpson as manager of Coster Shop.

Cloude R. Colklesser, assistant manager of insurance, appointed manager of insurance, Washington, D. C., succeeding Carlisle Needham, retired. J. Hugh Lowe, eneral supervisor, fire prevention, succeeds Mr. Colklesser.

Rush A. Kelso appointed division engineer, Alabama Great Southern, Woodstock & Blocton, New Orleans & Northeastern and New Orleans Terminal, at Birmingham, Ala.

SOUTHERN PACIFIC .- R. M. Scott appointed superintendent of communications, San Francisco, to replace A. E. DeMattei, promoted (RA, Jan. 25, p. 36).

UNION PACIFIC.-Carl H. Mertens, acting general advertising manager, appointed general advertising manager, Omaha, Neb.

WESTERN MARYLAND.-W. Fred Mowen, supervising agent, Hagerstown, Md., promoted to superintendent, Western division, Cum-berland, Md., succeeding the late Joseph M. Miller. James R. Wilson, traveling auditor, succeeds Mr. Mowen.

Supply Trade

Philip F. Gray, Jr., and Thomas R. Elmblad have been named managers of the Boston and Cleveland district sales offices, respec-tively, Whiting Corp., Harvey, Ill. Mr. Gray was on the sales staff of Whiting's New York

domestic office and Mr. Elmblad was in the Pittsburgh office. J. A. McGlone, Chicago sales, has been appointed sales manager of Whiting's Trambeam overhead material handling systems at Harvey. B. L. Heinen, material Houston office, has been transferred to Chicago, R. A. Rogers has been transferred from Chicago to the Charlotte district office.

George F. Lytle has been named manager of Whiting Corporation's newly formed Pressure-

grin Division.

Gregory G. Gogarin has been appointed to the newly created position of mechanical assistant to vice president—foreign operations of W. H. Miner, Inc., at Washington, D. C. Nils E. Anderson has been named an assistant vice president, Accounting divi-

William E. Witholl has been elected executive vice president, W. H. Miner, Inc. Roland J. Olunder has been appointed manager of the newly created special products department. Harry W. Mulcahy named to the newly created position of manager of research and development department.

Raymond C. Schleihs, sales representative in the western territory, Hunt-Spiller Manu facturing Corp., has been appointed general sales manager, Boston, succeeding Frank W. Lampton, who retired on Jan. 31.

Gerold F. Fox, a sales engineer with Dona Corp. at Toledo, Ohio, has been transferred to the west coast area in a similar capacity.

P. J. Mazziotti, chief engineer of the universal joint division of Dona Corp., has been named manager of research and development.

Myron M. Scholl and Orville E. Phelps have
been appointed assistant managers of research and development. John A. Koyser has been named chief engineer and James Lyons, assistant chief engineer of the universal joint division. R. E. Fletcher has been appointed chief engineer, mechanical transmission division. Norman Revenaugh and Louis Stuckey become assistant chief engineers of production engineering and advanced engineering, respectively, of the mechanical transmission division

Poul Schroeder, plant superintendent, Kensington Steel Division of Poor & Co., has been appointed vice president of manufacturing.

Archie B. Struthers, traffic manager for Whitehead & Kales Co., Detroit, has been named railroad sales representative.

R. L. Frederick, assistant to the president of the Timken Roller Bearing Co., Canton, Ohio, has been appointed to the new position of executive director-International division.

Robert P. Fox and E. W. Taylor have joined American Hoist & Derrick Co., St. Paul, Minn., as chief engineer-revolver cranes, hoists and derricks, and manager engineered projects division, respectively. Mr. Fox was formerly chief engineer of Clyde Iron Works of Duluth, Minn. Mr. Taylor was vice president and chief engineer of Industrial Brownhoist Corp. of Bay City, Mich.

E. A. Grimes has been appointed district sales manager of the Allegheny district, Graybar Electric Company.

Minnesota Mining and Manufacturing Co. has appointed Frank H. Shaules as special representative to midwestern railroads, with headquarters at Chicago.

Current Publications

BOOKS

THE LOUISVILLE & NASHVILLE RAILROAD, 1850-1959, by Kincaid A. Herr. 234 pages, illustrated, with maps and index. Published by L&N Magazine, Louisville, Ky. \$3.00.

The original history of the L&N, one of the most comprehensive of all railroad histories when it appeared in April 1943, has been enlarged by the addition of three new chapters covering the war and post-war years. The original appendices covering motive power, rolling stock and roadway have also been brought up to date. Written originally for the L&N Magazine by a long-time staff member, parts of the present volume began appearing in 1939 and formed a major feature of the magazine for almost four vears. Because of its magazine origin, the book has a three-column format and a large page size; for the same reason, it has a wealth of photographs, drawings and charts.

CASEY JONES' LOCKER, by Frederic Shaw. 192 pages, illustrations, maps. Hesperian House, Book Publishers, Inc., 465 California St., San Francisco, \$5.

In this beautifully-produced book, which is sub-titled "Railroad Historiana," Shaw has assembled material culled from the great days of steam-maps, photographs, drawings, memoranda, history and anecdotes.

DIRECTORY OF RAILWAY OFFICIALS AND YEAR BOOK, 1959-1960, compiled from official sources under the direction of the editor of the Railway Gazette, 616 pages. Tothill Press Ltd., 33 Tothill st., Westminster, S.W.1, London, 62 shillings, including postage.

In addition to the usual statistics and lists of officers of the various railroads throughout the world, the current edition of the Year Book has been expanded to include a new section covering suppliers of signaling and interlocking equipment arranged alphabetically under countries. In addition, the names of such firms are classified separately under products. The list of principal electrically-operated railways has been amplified, and other features in the statistical section have been revised

RAILROAD EQUIPMENT FINANCING, by Donald M. Street, 177 pages. Columbia University Press, 2960 Broadway, New York 27. \$6.

Discusses the various means by which American railroads finance rolling stock.

Dividends Declared

CHESAPEAKE & OHIO.—common, \$1, quarterly, payable March 21 to holders of record March 1; 31/2% convertible preferred, 871/2¢, quarterly, payable May 1 to holders of record April 7. CLEVELAND & PITTSBURGH.—7% regular quarteed, 871/2¢, quarterly, 4% special guaranteed, 50¢, quarterly, both payable March 1 to holders of record Feb. 10.

ERIE & KALAMAZOO.—\$1.50, semiannuol, payable Feb. 15 to holders of record Jen. 30.

FT. WAYNE & JACKSON.—5/2% preferred, \$2.75, semiannuol, payable March 3 to holders of record Feb. 10.

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Before you buy any battery

LOOK AT THE OTHER SIDE OF THE PRICE TAG!



Car lighting . . . air conditioning . . . industrial trucks . . . communications . . . signalling . . . multiple-unit controls railroaders agree that EDISON Nickel-Alkaline batteries actually cost less in the long run. Write Storage Battery Division, Thomas A. Edison Industries. West Orange, N. J., for booklet or contact your local Edison representative. In Canada: CLM Industries, Division of McGraw-Edison (Canada) Ltd., Toronto 13, Canada

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New active material gives Edison even longer life . . . even greater durability

EDISON Nickel-Alkaline STORAGE BATTERIES

Another Product of



clear the track for the **NEW**

"RIBBONRAIL"

SERVICE EQUIPMENT

A <u>new RIBBONRAIL Service—an entirely</u> new approach to the best-known, most dependable rail welding system known today—designed to increase your production and cut rail welding costs. Watch for the announcement.

OXWELD RAILROAD DEPARTMENT



"Linde", "Oxweld", and "Union Carbide" are trade marks.

Carloadings Drop 2.3% Below Previous Week's

Loadings of revenue freight in the week ended Feb. 6 totaled 587,933 cars, the Association of American Railroads announced on Feb. 11. This was a decrease of 13,967 cars, or 2.3%, compared with the previous week; an increase of 22,181 cars, or 3.9%, compared with the corresponding week last year; and an increase of 55,537 cars, or 10.4%, compared with the equivalent 1958 week.

Loadings of revenue freight for the week ended Jan. 30 totaled 601,900 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS

REVENUE F		R LOADIN	
District Eastern Allegheny Pocahonfas Southern Northwestern Central Western Southwestern	1960 97,463 116,162 52,619 113,986 63,533 110,533 47,604	1959 90,249 100,742 50,972 115,885 63,951 112,577 48,000	1958 87,199 100,197 46,070 107,195 61,312 100,696 47,863
Total Western Districts	221,670	224,608	209,871
Total All Roads .	601,900	582,456	550,532
Commodities: Grain and grain products Livestock Coal Coke Forest Products Ore Merchandise I.c.I. Miscellaneous	50,903 4,202 115,251 12,159 40,062 20,244 38,304 320,775	54,899 4,881 117,815 8,705 40,187 14,706 41,994 299,269	51,784 4,360 112,410 7,241 35,897 14,010 46,129 278,701
Jan. 30	601,900 587,339 605,757 591,515 483,012	582,456 555,750 586,342 550,666 468,219	550,532 551,088 572,886 569,807 472,284
Cumulative total			

Cumulative total, 4 weeks 2,386,511 2,275,214 2,244,313

PIGGYBACK CARLOADINGS.

—U. S. piggyback loadings for the week ended Jan. 30 totaled 10,218 cars, compared with 7,029 for the corresponding 1959 week. Loadings for 1960 up to Jan. 30 totaled 38,244 cars, compared with 26,060 for the corresponding period of 1959.

IN CANADA.—Carloadings for the ten-day period ended Jan. 31 totaled 85,531 cars, as compared with 67,186 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Total Cars Cars Rec'd from Loaded Connections
Totals for Canada Jan. 31, 1960	85,531 41,803
Jan. 31, 1959 Cumulative Totals	95,890 39,119
Jan. 31, 1960	268 585 123 336
Jon. 31, 1959	280.936 113.043

New Equipment

FREIGHT-TRAIN CARS

► American Refrigerator Transit.—Ordered 100 50½-ft RBL cars from Pullman-Standard at a cost of approximately \$17,000 each. Delivery is scheduled for May.

► Illinois Central.—Ordered 200 70-ton gondolas from Bethlehem Steel, as part of its 1960 car acquisition program (RA, Dec. 7, 1959, p. 35).

► Rock Island.—Ordered 100 50½-ft, 50-ton PS-1 box cars from Pullman-Standard—part of a \$2,448,283 order that also includes 100 piggyback flats (see below). Delivery of the box cars, which will be equipped with DF loaders and 15-ft doors, will follow delivery of 500 box cars previously ordered and scheduled for delivery beginning this month (RA, Nov. 16, p. 31).

➤ Santa Fe.—Has ordered 500 50-ft, 70-ton mechanical refrigerator cars. These were incorrectly described as 50-ton, 70-ft cars in an earlier issue (RA, Feb. 8, p. 31).

PIGGYBACK

▶ Pennsylvania.—Has ordered through its subsidiary, Excelsior Truck Leasing Co., 100 high-cube van trailers for piggyback operations. Purchase will increase the road's total piggyback trailer fleet to 850 units.

► Rock Island.—Ordered 100 85-ft piggyback flat cars from Pullman-Standard. These are in addition to 100 flats ordered last November and scheduled for delivery starting in May.

➤ Soo Line.—Ordered 10 85-ft piggyback flat cars from Pullman-Standard for delivery in May.

PASSENGER-TRAIN CARS

▶ New York City Transit Authority.—Between 1961-1964, will need 1,800 new subway cars to replace obsolete equipment (RA, Sept. 7, 1959, p. 43; Sept. 14, 1959, p. 65). The authority is currently exploring the possibility of ordering all cars at one time, with payments and deliveries spaced out over a specified period. Objective: obtaining lower prices by giving builders an assured flow of work.

New Facilities

► Kansas City Southern.—Included in estimated \$3,500,000 1960 A&B budget is installation of CTC between Heavener, Okla., and Siloam Springs, Ark., 108.7 miles, \$1,500,000; rail replacement, \$50,000.

► Long Island.—Will install CTC between Hicksville, N. Y., and Smithtown, 22.5 miles, on its Port Jefferson Branch. Cost: approximately \$500,000. Project is scheduled for completion next November.

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Editors Afield

Highland Park, Ill., Feb. 4-I have just attended the final luncheon session of a most unusual seminar.

For the better part of three days (Feb. 2-4), a hundred salesmen have been working together here to trade ideas about their jobsabout how the problem of selling to railroads is changing, and about how supply company sales techniques are adjusting to meet those changes.

This seminar may now become an annual affair, judging by the reactions of those here. The meeting was sponsored by the Railway Progress Institute as part of the institute's program to help suppliers and to help strengthen the industry concept among supply companies. No such meeting as this has ever been held before, to my knowledge.

It was decided to limit attendance to 100. As it turned out, there were more applicants than space: and a few late-comers were turned down.

Since there are obvious areas in which suppliers aren't allowed to compare notes for legal reasons. this seminar has been sharply structured into discussion groups with specific topics assigned.

Tuesday afternoon, for example, ten-man groups tangled with the basic question of changing problems of selling to railroads. That evening reporters from each group reported back. They agreed, in substance, that changes are occurring: there is a trend toward centralization of purchasing on some roads; standardization is increasing, and more suppliers are now having to sell to other suppliers as well as to railroads; and the railroad push for lower inventories is placing greater emphasis on local warehousing and quick deliveries off suppliers' shel-

Yesterday the groups ranged into new areas: railroad receptiveness to new ideas; integrating sales with service; who controls railroad purchasing; research and testing; organizing for railroad sales; sales aids, and purchasing, delivery and inventory procedures. And in the reporters' reports, at lunch, it was evident that the seminar's planners had tapped a sound idea. Supplier salesmen can learn from each other, and out of debates about mutual problems come new understanding and new ideas.

Four railroad officers came into

the meeting yesterday afternoon: Harold A. Berry, manager, purchases & stores, Rock Island; W. J. Hedley, chief engineer, Wabash; C. N. Wiggins, chief mechanical officer, L&N, and J. J. Wright, director of research, NYC. The supplier group threw questions at this panel for two hours. "How often should a salesman call, Mr. Berry? How much value is there. Mr. Hedlev, in convention exhibits and equipment demonstrations on the property? Why the delay in getting AAR approval for new interchange items, Mr. Wiggins? Would it be good, Mr. Wright, if railroads themselves took on more of the research that suppliers have traditionally carried on for railroad customers?"

Replies to these and other questions were handled with great candor. Trouble is, they can't be reported since the entire seminar was off-the-record.

Wednesday night the group came back together for the only formal speech of the seminar. Dr. Ralph G. Nichols, University of Minnesota, suggested, in effect, that the best listener may be the best salesman: that while schools emphasize the teaching of reading, writing and speaking, nobody teaches listening. Dr. Nichols pegged "failure to listen" as a major handicap in busi-

This morning, in a final session, the entire seminar group joined in a ballroom-size circle conference. More discussion: You running into any requests for 3-day billing? Deferred billing? Are railroads any different, really, than any big multiplant company when it comes to finding the right man in the organization to talk to? What's your experience on foreign competition? Are your salesmen also service men, or are service engineers better? And so it went.

As RPI President Holcombe Parkes summed it up at lunch today, the meeting was an experiment that seems to have worked. This sharing of experiences can't help but benefit, if only by causing everyone present to re-examine his own selling practices. About a similar meeting in 1961? Most certainly it will be considered; it will depend, in large part, on how this vear's participants vote on the review questionnaire they're to mail in within the next two weeks.

-Joe W. Kizzia

Milwaukee, Rock Island Retain Merger Consultants

Rock Island-Milwaukee merger studies received a shot in the arm last week. Board chairmen of both roads announced that feasibility studies begun last November (RA, Nov. 19, 1959, p. 9) would be aided by legal, financial and engineering consultants employed by the two roads.

Legal aspects of merger will be probed by the Chicago law firm of Sidley, Austin, Burgess and Smith. A New York investment banking firm, R. W. Pressprich and Co., has been retained to make financial studies. Possible economies from elimination of duplicate facilities will be studied by Coverdale and Colpitts, New York

consulting engineers.

A Rock Island-Milwaukee merger would create an 18,000-mile railroad system directly serving the Pacific Northwest, the Great Plains states, Texas and Mississippi river ports as well as western Great Lakes ports. With two trans-continent connections (UP and SP) the merged lines would provide service from east of the Mississippi to the West Coast.

Detailed studies by the consulting firms are expected to be completed

within the year.

Patterson Prescribes for Suburban Service Sickness

Railroad suburban passenger service generally-but especially in the New York area—has two basic needs:

· Enough money for continued operation of necessary facilities with reasonable fares and good equipment.

· An organizational structure planned to produce the best possible service with available funds.

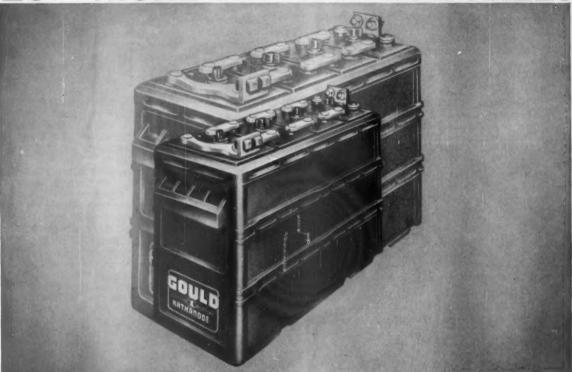
That's the prescription outlined to the New York Society of Security Analysts on Feb. 5 by Charles Patterson, chairman of the New York City Transit Authority.

Generally, Mr. Patterson said, railroad suburban trackage is adequate. Additions to it would probably be prohibitively expensive. But there is room for modernization, especially in equipment. In his view, money for such modernization must come partly from commuters, but partly also from government-local, state or, if necessary, federal. Management of the modernized facilities, however, should be left with present operators.

The commuter problem, Mr. Patterson feels, is "not a case of public vs. private transport," but a question of how to organize for most efficient mass

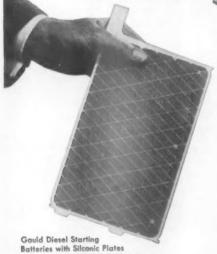
movement of people."

25% MORE BATTERY LIFE FREE!



WITH THE NEW

GOULD SILCONIC PLATE



Used in all diesel starting batteries, the Silconic Plate prevents grid corrosion, the most common cause of battery failure. Here's the principle: Gould introduces silver and cobalt into active materials of the positive plates. Silver and cobalt migrate to-and collect on-positive grid members, forming an insoluble oxide surface impervious to acid and oxygen attack. The longer the battery operates, the deeper the silver-cobalt penetrates into the grid metal, thus prolonging life. In applications where batteries are idle for periods of time, Gould's Silconic Plate prevents migration of materials to the negative plate, effectively reducing selfdischarge within the cell.

For greater overall strength, arsenic is added to the antimonial alloy of the plate, resulting in an extremely dense, homogeneous grid free of flaws. This vital new physical and chemical strengthtogether with Gould's compact battery design-add up to the most advanced diesel starting battery you can buy. Write today or call your local Gould representative. He's listed under "Batteries Industrial" in the yellow pages. Gould-National Batteries, Inc., Trenton 7, N. J. In Canada, Write to Gould-National Batteries of Canada, Ltd., 1819 Yonge Street, Toronto, Ontario

More Power to you from GOULD

resist corrosion, hold their charge

and last longer.

If Your Road Hauls Commuters . . . How Do You Compare with the C&NW?*

	Total	Per Dollar of Revenue
REVENUES	12,394,642	\$1.00
EXPENSES		
Train Costs Crew wages Diesel fuel oil used Cost of servicing and cleaning locomotives	2,895,778 456,345	
Cost of repairs to locomotives and cars Locomotive and car depreciation Damage to property and personal injuries	1,329,009 1,176,021 1,024,094 286,061	.10
\$	7,167,308	\$.58
Station Operating Costs\$	703,506	\$.06
Property Costs Repairs to tracks and buildings	1,067,023 386,481 281,132	.03
	1,734,636	
Taxes (including payroll taxes of \$506,883)\$	1,035,453	\$.08
Miscellaneous Interest on equipment obligations \$ Supervision and administrative expense Sales and service expense Other	354,191 915,442 169,638 284,914	2 .08
\$	1,724,185	5 \$.14
Total expenses\$	12,365,088	\$1.00
Net Income	29,55	4 Nil
		- recommend

*No two railroads are alike—a point that has to be remembered when comparisons are made. The figures above are the Chicago & North Western's report on 1959 suburban operations—a year in which the road handled 20,909,860 passengers on some 50,000 suburban trains. At year's end, North Western was carrying, on an average weekday, 78,000 passengers on 162 suburban trains. Average length of haul per passenger: 20.3 miles.

CONGRESS GETS COMMUTER BILLS (Continued from page 9)

templated that the advisory committee's recommendations would be forwarded to Congress "at least once a year as part of its annual report and more frequently when deemed advisable in the national interest." His proposal, Mr. Javits also said, is a step Congress should take now because it "must heed the growing chorus which regards U.S. railroads as an incurably sick industry which one day, it is implied, may be taken over by the government." The Senator's reaction to this "chorus" is:

"On the contrary, the combined resources and facilities of the railroads and the federal government should be channeled into a coordinated, maximum effort in research and development programs to enable this vital industry to modernize its facilities and upgrade its operational efficiency and services in the discharge of its present responsibilities. Also the railroads must be capable of executing whatever additional steps may be necessary to meet any emergency as well as anticipated demands in the future. That is the concept underlying this joint resolution."

In noting that the commutation problem would be a "major concern" of the proposed advisory committee, Senator Javits said: "Many railroads believe short haul passenger service for commuters has long passed the point of no return for them."

The deduction-from-income-tax proposal was introduced by Representative Zelenko, Democrat of New York. He called the plan "simple and workable," explaining it as follows:

"The commuter, when filing his income tax return, would annex his commutation stub with a simple form... showing any additional commutation fare that he paid over the rate of January 1, 1960. He would receive a credit against his income tax of that year or a refund of the amount of increased payments for commutation. In other words, if the new increase on his commutation fare for the year is \$50 and the taxpayer has to pay \$300, he will then pay only \$250."

A number of bills to tighten trainoff provisions of the 1958 Transportation Act generally follow the pattern of S.2935, introduced in the Senate
by Senator Magnuson of Washington,
chairman of the Committee on Interstate and Foreign Commerce, which
handles transport legislation. Joining
with Mr. Magnuson in sponsorship of
this bill are more than 20 other senators. The bill is supported by railroad
labor organizations, as are like bills
which have been introduced in the
House.

As Senator Magnuson explains it, the proposed legislation is designed to give passengers and communities greater voice in train-abandonment cases before the ICC. The senator summarized his bill's "principal provisions" as follows:

1. Clarifies standards which ICC should use in deciding whether removal of passenger train schedule is warranted.

2. Gives ICC authority to require a railroad to put a train back in service if changed circumstances show that the schedule is in the public interest.

3. Requires ICC to give notice to all interested parties that an application is pending and notice at least 3 days in advance that a hearing is to be held on an application to terminate passenger train service.

4. Requires ICC to hold a hearing on an application to discontinue a passenger train schedule if complaints are filed by the state or communities affected and places upon railroads the burden of proof.

5. Gives ICC authority to inspect passenger trains to ensure that reasonable standards of comfort, sanitation and safety are maintained.

Meanwhile, in the eastern commuter trouble spots, the nature of the problem —and possible local solutions—varied with the locality.

In New York, which has the largest number of commuters and involves three states as well as a variety of local governments, the situation continued in an uneasy equilibrium after recent fare increases for the Pennsylvania and the New Haven. Though there are no new solutions to the problem in sight, neither are there any immediate proposals for further cuts in service.

"Countdown" on the New Haven, which President George Alpert said had begun for commuters when he the road's "commuter announced service survival plan" (RA, Jan. 11, p. 9), got by its first hurdle without going into the critical stage. First the ICC, then New York and Connecticut regulatory commissions agreed to let the road put a 10% fare increase in effect immediately. (Mr. Alpert had warned that if the requested 10% increase was delayed beyond Feb. 1, he would withdraw it and file for an immediate 70% increase.)

In another New York area, the Staten Island Rapid Transit told the city of New York (which in 1956 signed a lease agreement to keep the SIRT in commuter business) that the railroad would need at least \$3,870,000 from the city over the next 10 years if it is to continue in passenger operations. SIRT would also like the city to put up another \$1,000,000 to cover needed capital improvements.

More Cuts in Boston

In Boston, although B&M President P. B. McGinnis has taken newspaper ads to assert, "Yes, there is a railroad that likes commuters" (RA, Feb. 8, p. 36), most of the emphasis is on new reductions in service.

Still in the process of getting used to doing without service on the Old Colony line (abandoned last vear), Boston commuters are now faced with the fact that Boston & Albany commuter service will end after April 1. Train abandonment proceedings before the Department of Public Utilities have ended with approval of the railroad's petition to end all but through service between Boston and Springfield. The right of way may be used for an extension of the Massachusetts Turnpike, the DPU suggests.

The Jersey Central, in its monthly Commuter's Almanac distributed regularly to riders, devoted most of an issue to describing Philadelphia's new non-profit corporation set up to "buy" suburban service from the PRR and the Reading (RA, Jan. 26, p. 9). The Jersey Central's summary wound up with a pointed reminder: "The details of any solution of our own problem would inevitably be different, but the general pattern could very well apply. New Jersey commuters might well in-

sist that Governor Meyner and the New Jersey legislature take effective action along the lines of the Philadelphia plan."

Philadelphia's non-profit corporation, duly incorporated as the Passenger Service Improvement Corporation of Philadelphia, seems to have gained public approval of its plan to take over "Operation Northwest" and "Operation Northeast," the city-sponsored experiments with lower fares and improved service.

Philadelphia suburban service got

another big boost last month when a subcommittee of the Delaware River Port Authority recommended building a \$44,600,000 electrified line from Camden (across the Delaware River from Philadelphia) to Kirkwood, N. J., using Pennsylvania-Reading Seashore Line right of way. With connections to the Philadelphia subway system via existing tracks on the Benjamin Franklin Bridge, the subcommittee's engineering report predicted that the line would be self supporting at an average fare of 29 cents a ride.

John L. Lewis: Tough but Realistic

Executives of railroad labor unions could learn some economic facts of life by meditating on John L. Lewis' approach to a labor leader's job of promoting the welfare of his constituents.

That approach—a most realistic one—was pointed up prominently in tributes paid to Mr. Lewis when he retired from the presidency of the United Mine Workers, where he had served for 40 years.

He was a tough bargainer, but he never bargained for uneconomical working rules or other conditions which would have prevented making mining as efficient as possible, i.e., giving it the mechanization and modern operating practices it now has.



Mr. Lewis knew that make-work arrangements and resistance to technological change were not in the long-run interest of workers in a competitive industry—whatever they might provide in the way of temporary gains and comforts for union men with enough seniority to collect them while operations kept artificially uneconomic were letting the competition force their junior colleagues out of jobs.

Leaders of the coal industry have repeatedly hailed Mr. Lewis' genuine cooperation and active participation in the industry's drives for increased efficiency and aggressive marketing. Successes of these drives have kept coal competitive with other fuels and thus made mining a growth industry again.

While the increased-efficiency policy has permitted the mines to produce more coal with fewer and fewer employees, the Lewis role of cooperator has been explained to members of the United Mine Workers who, quite evidently, have accepted it. "They understand the need for it," Mr. Lewis has said, adding:

"It has not been a social revolution of any magnitude. When men are laid off, the men in the younger age brackets move into other industries. Some of the older men stay in the area and manage to get along with the help of relatives. Or they find other employment. There is public assistance and Social Security assistance in some cases. Pensions from the welfare fund help those who are over 60 years of age. There is a natural attrition of manpower, too."

-Walter Taft

You Ought To Know...

- Two operating unions are backing away from any attempt to tie their wage cases to the BLE dispute, soon to be arbitrated. The BLF&E contends that its case involves different issues—a higher wage hike, improvement (not just retention) of the cost-of-living escalator. And the SUNA, now circulating a strike ballot, says it "won't be satisfied to mark time while the Engineers settle."
- Reduced rail rates contributed to Armco Steel Corp.'s decision to close its river transport facilities in Ohio and West Virginia by April 1. "The cost of river transportation," said Vice President and General Manager Clyde G. Davies, "keeps going up steadily. The railroads, meanwhile, have lowered their charges for moving coal directly from mines in West Virginia to our mills in Hamilton and Middleton, Ohio." Even if sternwheelers were replaced by diesel tugboats, Mr. Davies noted, river transport couldn't compete with reduced rail rates.
- "Costs do not make prices" in utility rate-making and should not. This concept-and the general support of class rates it implies-might apply to railroads as well as to power utilities, consulting engineer Wiliam S. Leffler told the February meeting of New York's Transportation Research Forum. The five cardinal points of utility pricing, Mr. Leffler said, are: class rates must be such that each class will pay its own costs; rate schedules must not require from any class an excessive return; the value of service to the customer (rather than what the traffic will bear) is the upper limit of any rate; every customer and every class of service must bear some responsibility for the existence of the system as a whole; and pricing has a different function from costing -costs, alone, do not make prices.

- Railroad employment totaled 785,-871 in mid-January—down 1.31% from the previous month and 3.07% from January 1959.
- Erie's TOFC traffic brought the road revenue of close to \$4,000,000 in 1959—a 133% increase over the previous year. Best month was October, when the Erie rang up \$400,000 in piggyback business. The upward trend means, says David R. Thompson, vice president—traffic, that "shippers are willing to utilize a combination of transportation services if it contributes to efficient and economical operations."
- Piggyback revenues topped a million dollars for the first time last year on Illinois Central. The total, in excess of \$1,250,000, includes IC's own TOFC and the Plan I service begun last May. Plan I agreements are now in effect with approximately 21 truck lines. It appears, IC President Wayne A. Johnston commented, "that the service with the nursery rhyme name is giving every evidence of growing into manhood."
- A 455-acre industrial park in Phoenix, Ariz., has been purchased by the Santa Fe Land Improvement Co. (wholly-owned affiliate of ATSF). Formerly known as the Maryvale Industrial Park, the tract will be renamed the Alhambra Industrial District. It is a continuation of the railroad's 400-acre Camelback Industrial District acquired several years ago.
- A completely-equipped Texaco station is making the 344-mi trek from Montreal to Long Branch, Ont., on two CNR flat cars, a half on either car. The two halves of the portable, 28-ft. by 48-ft., prefab, steel, service station (with plumbing and wiring intact) will be bolted together at Long Branch. CNR estimated one week would be required for the daylight only, 30-m.p.h. trip, which began Saturday, Feb. 6.
- Lower sleeping car fares and budgetpriced meals are being offered by Soo Line on trains 13 and 14, operating between St. Paul-Minneapolis and Minot and Portal, N.D. Changes were effective Feb. 1.

- Burlington passenger revenues continue to climb. Gross for 1959 was up 2.2% over 1958. Aggressive, imaginative selling (student educational tours, weekend scenic tours, convention travel, Scout groups, "iron horse" tours) combined with high equipment utilization helped CB&Q show gains in gross passenger revenues in four of the last five years.
- Airline passenger traffic will more than double in the next decade, according to R. E. Johnson, senior vice president—sales and advertising, United Air Lines. Airlines, he said, "will attract additional passengers from both railroads and highways" and the "speed and service appeal of the new jet airlines will create new traffic where none existed before."
- A fare increase to help keep the operation on even keel is being sought by Chicago & North Western, which has promised its commuters a completely modern service by the end of 1961. C&NW showed a "nominal net income"—\$29,554—on suburban operations in 1959, but cost increases threaten to produce a \$400,000 deficit in 1960. The fare hike to be sought, North Western says, will amount to about 7½%. (See box, p 46.)
- A new set of "steel suspenders"—56 cables, each 300 ft long—will lift the lower-deck railroad span of Portland, Oregon's Steel Bridge to permit passage of river traffic. UP and SP, owners of the bridge, have ordered the three miles of steel cable from John A. Roebling Sons, Trenton, N. J., at a cost of \$18,000. The work will be done on eight successive Sundays starting April 3.
- Railway equipment suppliers will have "a good, though probably not a banner, year" in 1960, predicts the Value Line Investment Survey. The survey notes that "the rapid growth of piggybacking, which requires specialized equipment for maximum efficiency, may create sustained demand for new rolling stock in the years immediately ahead that will moderate over-all fluctuations in railroad equipment volume."



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SECTION

Railway Age, 30 Church St., New York 7, N. Y.

Automation—How Much, How Soon?

The "automatic railroad" is practically here right now—or it would be, if all the variety of devices necessary to operate trains without constant human attention were interconnected and applied in one place. Such, in substance, was the conclusion reached by John Hansen of Union Switch & Signal in a recent address (RA, Feb. 1, p. 34).

The devices facilitating automation will go on being extended much more widely than they are. They are not, as yet, sufficiently prevalent for anyone to be ready to take the final step to complete automation. Extension of these devices is constantly advancing-as, for example, the automatic approach clearing of CTC signals on the N&W, described elsewhere in these pages. Once a train is admitted to the CTC section, it will continue getting green signals-until interference from another train interposes; and, when this happens, a warning bell rings in the dispatcher's office, to bring his intervention. In short, what the new set-up does is to relieve the dispatcher of purely routine duties, allowing him to concentrate on tasks that require active human intelligence.

It is certainly conceivable, with automatic train identification, that train schedules, weight and other factors could be fed into a computer. The machine could do the lining-up for routine operation. The dispatcher's job then would be, largely, that of a trouble-shooter.

Such devices as detectors of hotboxes and defective equipment are far more dependable than catch-as-catch-can inspections by trainmen or towermen. And there is no logical reason why flagging should be required under the protection of automatic signals (especially when reinforced by train-stop mechanisms).

If the declining actual need for crewmen in cabooses and engine cabs were matched by a corresponding reduction in such assignments, then one of the major deterrents to frequency of railroad service (i.e., holding trains for economical tonnage) would diminish, or even disappear.

A top railway executive once observed to us that he'd gladly run 60-car trains, giving customers double frequency of service, if the brothers would agree to 3-man crews. Now, with 5 or 6 men required in a crew, he can't afford to run trains of less than 100 or more cars.

The extension of automation in railroading, of

course, involves much more than train operation. There's a lot still to be done in mechanizing the transfer of lading between rail and highway vehicles. One expert and imaginative industrial traffic executive foresees the day when railroad tariffs and rates can be put on tapes and punched cards. (Less optimistic observers believe that much greater simplification in the rates and tariffs will be necessary before the job can be entrusted entirely to mechanical and electronic machines.)

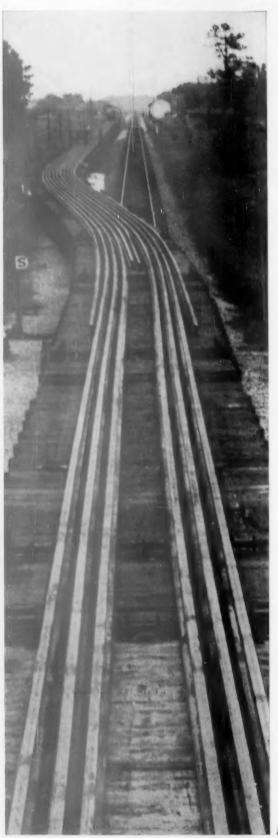
The point is that railroad transportation—with its vehicles held to a track and under strict centralized control (as highway, waterway and air transportation vehicles are not)—lends itself ideally to automation. The other day an airplane manufacturer was boasting that air freight is the only kind of freight transportation that can expect large decreases in costs. If the railroads should get really going in "automating" their operations wherever technologically possible, this airplane builder would be in for a surprise.

What railroading badly needs is some farsighted statesmanship on the union side, such as John Lewis provided for the bituminous coal industry. A dozen years ago it was apparent that both coal and railroading had a tough competitive situation to face. The reaction of union leadership in the two industries was widely different. John Lewis (as suggested on another page herein) apparently understood that a decline in mining employment was inevitable. He evidently also could foresee that unemployment certainly wouldn't be any worse with an efficient industry, earning profits and modernized to price competitively, than it would be if the union tried to "make work" by "full-crewing" all mining operations. Lewis, therefore, not only permitted the introduction of labor-saving machinery but actively encouraged it.

The people still in the mining industry are highly paid, with the biggest "fringe benefits" anywhere. Coal mining is now a "growth industry" again—and competing fuels have little or no hope of ever achieving cost reductions that the coal business cannot surpass.

It lies within the power of railway labor leadership to do the same service for the railroads—and, in the long pull, for railroad labor—that Lewis has done for coal mining and coal miners.





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